# UNIX System V

## Release 2.0

# Programmer Reference Manual

## Including BTL Computer Center Standard and Local Commands

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*This manual was set on an AUTOLOGIC, Inc. APS-5 phototypesetter driven by the TROFF formatter operating under the UNIX system.*

# PREFACE

This manual was designed through a cooperative effort of the BTL Computer Centers in Division 452. It represents a collection of nearly all the commands that are running on any Computer Center UNIX machine.

The manual pages for commands included in this manual fall into four different classes:

- Standard UNIX System V Release 2.0 commands
- Commands from various packages designated to become WECo Software Add-On packages
- Division 452 Computer Center Standard commands
- Local commands running at the various Computer Center locations.

The header of each manual page identifies the classification of the command along with any machine or site dependencies. Those commands whose headers indicate no classification are from Standard UNIX and are available on all machines. Any page marked **LOCAL** indicates the sites that are running that command. But it is possible that a local command may be available at more locations than indicated. Pages marked **DIV 452 STD** are from the collection of Computer Center standard commands, and are available on machines administered by Division 452 Computer Centers. The pages that are designated as **INTERIM** or **5.0** are those commands which are scheduled to be included in a separate WECo software add-on package. The pages that have been included herein with that heading reflect the version of that command which was included with the Division 452 Computer Center UNIX System Release. Due to some hardware and software dependencies or lack of user interest, however, some commands may not be running on all machines at your site. Any questions concerning this matter should be directed to your local System Administrator.

In some instances, two different commands have the same name. In these cases, both pages were included in the manual. The one running at your site can be determined by the heading on the page. A command marked **LOCAL** overrides both Standard UNIX and **DIV 452 STD** commands with the same name; those marked **DIV 452 STD** override the Standard UNIX commands.

# ACKNOWLEDGMENTS

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Editors

# INTRODUCTION

This manual describes the programming features of the UNIX system. It provides neither a general overview of the UNIX system (for that, see "The UNIX Time-Sharing System," *BSTJ*, Vol. 57, No. 6, Part 2, pp. 1905-29, by D. M. Ritchie and K. Thompson), nor details of the implementation of the system (see "UNIX Implementation," *BSTJ*, same issue, pp. 1931-46).

Not all commands, features, and facilities described in this manual are available in every UNIX system. The entries not applicable for a particular hardware line will have an appropriate caveat stamped in the center of the mast of an entry. Also, programs or facilities being phased out will be marked as "Obsolescent" on the top of the entry. When in doubt, consult your system's administrator.

This manual is divided into four sections, some containing inter-filed sub-classes:

2. System Calls.
3. Subroutines:
   - 3C. C and Assembler Library Routines
   - 3S. Standard I/O Library Routines
   - 3M. Mathematical Library Routines
   - 3X. Miscellaneous Routines
   - 3F. FORTRAN Library Routines
4. File Formats.
5. Miscellaneous Facilities.

**Section 2** (*System Calls*) describes the entries into the UNIX system kernel, including the C language interface.

**Section 3** (*Subroutines*) describes the available subroutines. Their binary versions reside in various system libraries in the directories **/lib** and **/usr/lib**. See *intro*(3) for descriptions of these libraries and the files in which they are stored.

**Section 4** (*File Formats*) documents the structure of particular kinds of files; for example, the format of the output of the link editor is given in *a.out*(4). Excluded are files used by only one command (for example, the assembler's intermediate files). In general, the C language **struct** declarations corresponding to these formats can be found in the directories **/usr/include** and **/usr/include/sys**.

**Section 5** (*Miscellaneous Facilities*) contains a variety of things. Included are descriptions of character sets, macro packages, etc.

Each section consists of a number of independent entries of a page or so each. The name of the entry appears in the upper corners of its pages. Entries within each section are alphabetized, with the exception of the introductory entry that begins each section (also section 3 is in alphabetical order by suffixes). Some entries may describe several routines, commands, etc. In such cases, the entry appears only once, alphabetized under its "major" name.

All entries are based on a common format, not all of whose parts always appear:

The **NAME** part gives the name(s) of the entry and briefly states its purpose.

The **SYNOPSIS** part summarizes the use of the program being described. A few conventions are used, particularly in Section 2 (*System Calls*):

**Boldface** strings are literals and are to be typed just as they appear.

*Italic* strings usually represent substitutable argument prototypes and program names found elsewhere in the manual (they are underlined in the typed version of the entries).

Square brackets [] around an argument prototype indicate that the argument is optional. When an argument prototype is given as "name" or "file", it always refers to a *file* name.

Ellipses ... are used to show that the previous argument prototype may be repeated.

A final convention is used by the commands themselves. An argument beginning with a minus −, plus +, or equal sign = is often taken to be some sort of flag argument, even if it appears in a position where a file name could appear. Therefore, it is unwise to have files whose names begin with −, +, or =.

The **DESCRIPTION** part discusses the subject at hand.

The **EXAMPLE(S)** part gives example(s) of usage, where appropriate.

The **FILES** part gives the file names that are built into the program.

The **SEE ALSO** part gives pointers to related information.

The **DIAGNOSTICS** part discusses the diagnostic indications that may be produced. Messages that are intended to be self-explanatory are not listed.

The **WARNINGS** part points out potential pitfalls.

The **BUGS** part gives known bugs and sometimes deficiencies. Occasionally, the suggested fix is also described.

A table of contents precedes Section 2. On each *index* line, the title of the entry to which that line refers is followed by the appropriate section number in parentheses. This is important because there is considerable duplication of names among the sections, arising principally from commands that exist only to exercise a particular system call.

On most systems, all entries are available on-line via the *man*(1) command (see Section 1 of the *UNIX System User Reference Manual*).

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alarm: set a process — alarm clock. . . . . alarm(2)
clock. — alarm: set a process alarm . . . . . alarm(2)
change data segment space — allocation. brk, sbrk: . . . . . brk(2)
realloc, calloc: main memory — allocator. malloc, free, . . . . . malloc(3C)
mallinfo: fast main memory — allocator. /calloc, mallopt, . . . . . malloc(3X)
natural logarithm/ log, — alog, dlog, clog: Fortran . . . . . log(3F)
logarithm intrinsic/ log10, — alog10, dlog10: Fortran common . . . log10(3F)
wordy sentences and suggest — alternatives. diction: print . . . . . diction(1)
print sexist terms and suggest — alternatives. sexist: . . . . . sexist(1)
Fortran/ max, max0, — amax0, max1, amax1, dmax1: . . . . max(3F)
max, max0, amax0, max1, — amax1, dmax1: Fortran/ . . . . . max(3F)
Fortran/ min, min0, — amin0, min1, amin1, dmin1: . . . . . min(3F)
min, min0, amin0, min1, — amin1, dmin1: Fortran/ . . . . . min(3F)
remaindering intrinsic/ mod, — amod, dmod: Fortran . . . . . mod(3F)
characteristics of a/ style: — analyze surface . . . . . style(1)
document. abst: — analyze the abstractness of a . . . . . abst(1)
rshift: Fortran bitwise/ — and, or, xor, not, lshift, . . . . . bool(3F)
/getgid, getegid: get real — and/or effective user and/ . . . . . getuid(2)
xchng: change owner — and/or group. . . . . xchng(1)
whereis: locate binary, source — and/or manual pages. . . . . whereis(1)
sort: sort — and/or merge files. . . . . sort(1)
send, gath: gather files — and/or submit RJE jobs. . . . . send(1C)
Fortran nearest integer/ — anint, dnint, nint, idnint: . . . . . round(3F)
format. — a.out: Basic-16 object file . . . . . b16a.out(4)
link editor output. — a.out: common assembler and . . . . . a.out(4)
link editor output. — a.out: PDP-11 assembler and . . . . . a.out.pdp(4)
introduction to commands and — application programs. intro: . . . . . intro(1)
daps, di10: Autologic — APS-5 phototypesetter filter. . . . . daps(1)
apstat: request status of — APS-5 phototypesetter jobs/ . . . . . apstat(1)
device-independent troff to/ — apsend: send output from . . . . . apsend(1)
APS-5 phototypesetter jobs/ — apstat: request status of . . . . . apstat(1)
maintainer. — ar: archive and library . . . . . ar.pdp(1)

maintainer for portable/ ar: archive and library . . . . . ar(1)
ar: archive file format. . . . . ar.pdp(4)
format. ar: common archive file . . . . . ar(4)
language. bc: arbitrary-precision arithmetic . . . . . bc(1)
acos, dacos: Fortran arccosine intrinsic function. . . . . acos(3F)
catalog. arch: format of archive . . . . . arch(4)
archive. arch: interface to system . . . . . arch(1)
maintainer. ar: archive and library . . . . . ar.pdp(1)
for portable archives. ar: archive and library maintainer . . . . ar(1)
archive: archive and retrieve files. . . . . archive.mh(1)
arch: interface to system archive. . . . . arch(1)
files. archive: archive and retrieve . . . . . archive.mh(1)
arch: format of archive catalog. . . . . arch(4)
cpio: format of cpio archive. . . . . cpio(4)
parch: transfer ATS archive document to UNIX. . . . . parch(1C)
ar: common archive file format. . . . . ar(4)
ar: archive file format. . . . . ar.pdp(4)
the header of a member of an archive file. ldahread: read . . . . . ldahread(3X)
common archive/ arcv: convert archive files from PDP-11 to . . . . . arcv.pdp(1)
convert: convert object and archive files to common/ . . . . . convert(1)
files from PDP-11 to common archive format. /archive . . . . . arcv.pdp(1)
archstat: print status of archive scheduler. . . . . archstat(1)
retrieve files from archives. archive: send files to and . . . . . archive.div(1)
trail: print trail of archived files. . . . . trail(1)
HP 2645A terminal tape file archiver. hpio: . . . . . hpio(1)
tar: tape file archiver. . . . . tar(1)
maintainer for portable archives. /archive and library . . . . . ar(1)
to and retrieve files from archives. archive: send files . . . . . archive.div(1)
cpio: copy file archives in and out. . . . . cpio(1)
archive scheduler. archstat: print status of . . . . . archstat(1)
asin, dasin: Fortran arcsine intrinsic function. . . . . asin(3F)
atan2, datan2: Fortran arctangent intrinsic function. . . . . atan2(3F)
atan, datan: Fortran arctangent intrinsic function. . . . . atan(3F)
from PDP-11 to common archive/ arcv: convert archive files . . . . . arcv.pdp(1)
imaginary part of complex argument. /dimag: Fortran . . . . . aimag(3F)
return Fortran command-line argument. getarg: . . . . . getarg(3F)
varargs: handle variable argument list. . . . . varargs(5)
formatted output of a varargs argument list. /print . . . . . vprintf(3S)
command. xargs: construct argument list(s) and execute . . . . . xargs(1)
getopt: get option letter from argument vector. . . . . getopt(3C)
expr: evaluate arguments as an expression. . . . . expr(1)
echo: echo arguments. . . . . echo(1)
bc: arbitrary-precision arithmetic language. . . . . bc(1)
number facts. arithmetic: provide drill in . . . . . arithmetic(6)
news: USENET network news article, utility files. . . . . news(5)
inews: submit news articles. . . . . inews(1)
postnews: submit news articles. . . . . postnews(1)
readnews: read news articles. . . . . readnews(1)
uurec: receive processed news articles via mail. . . . . uurec(1)
expr: evaluate arguments as an expression. . . . . expr(1)
as: assembler for PDP-11. . . . . as.pdp(1)
as: Basic-16 assembler. . . . . b16as(1)
as: common assembler. . . . . as(1)
characters. asa: interpret ASA carriage control . . . . . asa(1)
control characters. asa: interpret ASA carriage . . . . . asa(1)
ascii: map of ASCII character set. . . . . ascii(5)
convert time and date from ASCII. getdate: . . . . . getdate(3X)
set. ascii: map of ASCII character . . . . ascii(5)

long integer and base-64 ASCII string. /convert between . . . . a64l(3C)
tables. aetab, eatab: ASCII to EBCDIC conversion . . . . aetab(3)
and/ ctime, localtime, gmtime, asctime, tzset: convert date . . . . . ctime(3C)
include macros. asilib: assembly language . . . . . asilib(4)
trigonometric/ sin, cos, tan, asin, acos, atan, atan2: . . . . . trig(3M)
intrinsic function. asin, dasin: Fortran arcsine . . . . . asin(3F)
help: ask for help. . . . . help(1)
output. a.out: common assembler and link editor . . . . . a.out(4)
output. a.out: PDP-11 assembler and link editor . . . . . a.out.pdp(4)
as: common assembler. . . . . as(1)
as: Basic-16 assembler. . . . . b16as(1)
as: assembler for PDP-11. . . . . as.pdp(1)
and BELLMAC-4B/ m4as: assembler for the BELLMAC-4 . . . . m4as(1)
microprocessor. m8as: assembler for the BELLMAC-8 . . . . m8as(1)
KMC11B/ kasb, kunb: assembler/un-assembler for the . . . . kasb(1)
macros. asilib: assembly language include . . . . . asilib(4)
mass: execute assembly phase of MICA. . . . . mass(1)
assertion. assert: verify program . . . . . assert(3X)
assert: verify program assertion. . . . . assert(3X)
setbuf, setvbuf: assign buffering to a stream. . . . . setbuf(3S)
chbin: change bin assignment. . . . . chbin(1)
parts: part of speech assignment. . . . . parts(1)
a later time. at, batch: execute commands at . . . . at(1)
sin, cos, tan, asin, acos, atan, atan2: trigonometric/ . . . . . trig(3M)
arctangent intrinsic/ atan, datan: Fortran . . . . . atan(3F)
arctangent intrinsic/ atan2, datan2: Fortran . . . . . atan2(3F)
cos, tan, asin, acos, atan, atan2: trigonometric/ sin, . . . . . trig(3M)
double-precision/ strtod, atof: convert string to . . . . . strtod(3C)
integer. strtol, atol, atoi: convert string to . . . . . strtol(3C)
integer. strtol, atol, atoi: convert string to . . . . . strtol(3C)
parch: transfer ATS archive document to UNIX. . . . parch(1C)
atsmm: convert ATS to MM. . . . . atsmm(1)
document for nroff/MM. ats: transform pseudo-ats . . . . . ats(1)
atsmm: convert ATS to MM. . . . . atsmm(1)
link. x25alnk, x25ilnk: attach or install a BX.25 . . . . . x25alnk(3C)
phototypesetter/ daps, di10: Autologic APS-5 . . . . . daps(1)
proofr, proofer: automatic proofreader. . . . . proofr(1)
wait: await completion of process. . . . . wait(1)
processing language. awk: pattern scanning and . . . . . awk(1)
format. b16hx: Convert b16a.out file to hexadecimal . . . . . b16hx(1)
machine configuration file/ b16config: b16sts target . . . . . b16config(1)
to hexadecimal format. b16hx: Convert b16a.out file . . . . . b16hx(1)
on a port with no existing/ b16login: create login process . . . . . b16login(1)
b16pause: indefinite wait. . . . . b16pause(1)
Testing System. b16sts: Basic-16 Software . . . . . b16sts(1)
configuration file/ b16config: b16sts target machine . . . . . b16config(1)
ungetc: push character back into input stream. . . . . ungetc(3S)
back: the game of backgammon. . . . back(6)
back: the game of backgammon. . . . . back(6)
banner: make posters. . . . . banner(1)
imacv: IMAGE Data Base Converter. . . . . imacv(1G)
terminal capability data base. terminfo: . . . . . terminfo(4)
between long integer and base-64 ASCII string. /convert . . . . a64l(3C)
(visual) display editor based on ex. /screen-oriented . . . . . vi(1)
portions of path names. basename, dirname: deliver . . . . . basename(1)
as: Basic-16 assembler. . . . . b16as(1)
ld: link editor for Basic-16. . . . . b16ld(1)
on-line documentation for Basic-16. man: Print . . . . . b16man(1)

cc: Basic-16 C compiler. . . . . b16cc(1)
dis: Basic-16 Disassembler. . . . . b16dis(1)
list: Basic-16 lister. . . . . b16list(1)
nm: Basic-16 name list. . . . . b16nm(1)
a.out: Basic-16 object file format. . . . . b16a.out(4)
relocation information for a Basic-16 object file. reloc: . . . . . reloc.div(4)
scnhdr: section header for a Basic-16 object file. . . . . scnhdr.div(4)
filehdr: file header for Basic-16 object files. . . . . filehdr.div(4)
directory path names for Basic-16. paths: . . . . . paths(4)
Converter. conv: Basic-16 SGS Object File . . . . . b16conv(1)
size: Basic-16 size. . . . . b16size(1)
System. b16sts: Basic-16 Software Testing . . . . . b16sts(1)
strip: Basic-16 strip. . . . . b16strip(1)
prtv: print a Basic-16 transfer vector. . . . . b16prtv(1)
entry. tv: structure for Basic-16 transfer vector . . . . . tv(4)
metafile interface. mfsend: batch DI-3000 graphics . . . . . mfsend(1)
later time. at, batch: execute commands at a . . . . at(1)
broff: batching of nroff and troff. . . . . broff(1)
arithmetic language. bc: arbitrary-precision . . . . . bc(1)
bdiff: big diff. . . . . bdiff(1)
all forms of the verb "to be". findbe: find . . . . . findbe(1)
cb: C program beautifier. . . . . cb(1)
m4as: assembler for the BELLMAC-4 and BELLMAC-4B/ . . m4as(1)
symbolic debugger. m4mate: BELLMAC-4 Development System . . m4mate(1)
boolean/ m4pb: Converts BELLMAC-4 microcomputer . . . . . m4pb(1)
formatter for user/ m4phx: BELLMAC-4 microcomputer hex . . . m4phx(1)
file to hex/ m4hx: Convert BELLMAC-4 microcomputer object . . m4hx(1)
and PLA XY/ m4we: Generates BELLMAC-4 microcomputer ROM . . m4we(1)
m4.out: BELLMAC-4 object file format. . . . m4.out(4)
/for the BELLMAC-4 and BELLMAC-4B microcomputers. . . . m4as(1)
p8cc: portable BELLMAC-8 C compiler. . . . . p8cc(1)
Symbolic Debugger. m8db: BELLMAC-8 Development System . . m8db(1)
line lister for the C/ p8list: BELLMAC-8 dis-assembler and . . . p8list(1)
dis-assembler. m8list: BELLMAC-8 microprocessor . . . . . m8list(1)
module to/ m8hx: Convert BELLMAC-8 microprocessor load . . . m8hx(1)
m8as: assembler for the BELLMAC-8 microprocessor. . . . . m8as(1)
m8cc: C compiler for the BELLMAC-8 Microprocessor. . . . . m8cc(1)
m8ld: link editor for BELLMAC-8 microprocessor. . . . . m8ld(1)
m8ol: overlay link editor for BELLMAC-8 microprocessor. . . . . m8ol(1)
m8sim: simulator for the BELLMAC-8 microprocessor. . . . . m8sim(1)
object file format. m8.out: BELLMAC-8 microprocessor . . . . . m8.out(4)
j0, j1, jn, y0, y1, yn: Bessel functions. . . . . bessel(3M)
bfs: big file scanner. . . . . bfs(1)
from the BTL Bibliography. bibl: retrieve and list items . . . . . bibl(1)
and list items from the BTL Bibliography. bibl: retrieve . . . . . bibl(1)
chbin: change bin assignment. . . . . chbin(1)
fread, fwrite: binary input/output. . . . . fread(3S)
bsearch: binary search a sorted table. . . . . bsearch(3C)
tfind, tdelete, twalk: manage binary search trees. tsearch, . . . . . tsearch(3C)
pages. whereis: locate binary, source and/or manual . . . . . whereis(1)
remove symbols and relocation bits. strip: . . . . . strip.pdp(1)
/not, lshift, rshift: Fortran bitwise boolean functions. . . . . bool(3F)
bj: the game of black jack. . . . . bj(6)
bj: the game of black jack. . . . . bj(6)
sum: print checksum and block count of a file. . . . . sum(1)
sync: update the super block. . . . . sync(1)
PLA. /BELLMAC-4 microcomputer boolean description of user . . . . . m4pb(1)
rshift: Fortran bitwise boolean functions. /lshift, . . . . . bool(3F)

space allocation. brk, sbrk: change data segment . . . . brk(2)
troff. broff: batching of nroff and . . . . . broff(1)
modest-sized programs. bs: a compiler/interpreter for . . . . . bs(1)
sorted table. bsearch: binary search a . . . . . bsearch(3C)
into n-block pieces. bsplit: splits standard input . . . . . bsplit(1)
and list items from the BTL Bibliography. /retrieve . . . . . bibl(1)
stdio: standard buffered input/output package. . . . . stdio(3S)
setbuf, setvbuf: assign buffering to a stream. . . . . setbuf(3S)
x25ilnk: attach or install a BX.25 link. x25alnk, . . . . . x25alnk(3C)
x25clnk: change over a BX.25 link. . . . . x25clnk(3C)
x25dlnk: halt or detach a BX.25 link. x25hlnk, . . . . . x25hlnk(3C)
swab: swap bytes. . . . . swab(3C)
cc: Basic-16 C compiler. . . . . b16cc(1)
cc, pcc: C compiler. . . . . cc(1)
programs. scc: C compiler for stand-alone . . . . . scc(1)
Microprocessor. m8cc: C compiler for the BELLMAC-8 . . . m8cc(1)
p8cc: portable BELLMAC-8 C compiler. . . . . p8cc(1)
cflow: generate C flow graph. . . . . cflow(1)
cpp: the C language preprocessor. . . . . cpp(1)
cb: C program beautifier. . . . . cb(1)
lint: a C program checker. . . . . lint(1)
cxref: generate C program cross-reference. . . . . cxref(1)
ctrace: C program debugger. . . . . ctrace(1)
and line lister for the C source line. /dis-assembler . . . . . p8list(1)
object file. list: produce C source listing from 3B20S . . . . . list(1)
and submit it for execution. clsend: create a Cray-1 job . . . . . clsend(1)
value. abs, iabs, dabs, cabs, zabs: Fortran absolute . . . . . abs(3F)
information for Remote Job/ cacf: Record ACF2 access . . . . . cacf(1)
students and administer CAI materials. /register . . . . . teach(1)
cal: print calendar. . . . . cal(1)
prose program. mkstand: calculate style standards for . . . . . mkstand(1)
dc: desk calculator. . . . . dc(1)
cal: print calendar. . . . . cal(1)
calendar: reminder service. . . . . calendar(1)
uucall: call another system. . . . . uucall(1C)
cu: call another UNIX system. . . . . cu(1C)
cu: call another UNIX system. . . . . cu.ih(1C)
data returned by stat system call. stat: . . . . . stat(5)
malloc, free, realloc, calloc: main memory allocator. . . . malloc(3C)
fast/ malloc, free, realloc, calloc, mallopt, mallinfo: . . . . . malloc(3X)
intro: introduction to system calls and error numbers. . . . . intro(2)
sys3b: 3B20S specific system calls. . . . . sys3b(2)
to an LP line printer. lp, cancel: send/cancel requests . . . . . lp(1)
terminfo: terminal capability data base. . . . . terminfo(4)
pnch: file format for card images. . . . . pnch(4)
asa: interpret ASA carriage control characters. . . . . asa(1)
text editor (variant of ex for casual users). edit: . . . . . edit(1)
files. cat: concatenate and print . . . . . cat(1)
arch: format of archive catalog. . . . . arch(4)
cb: C program beautifier. . . . . cb(1)
cc: Basic-16 C compiler. . . . . b16cc(1)
cc, pcc: C compiler. . . . . cc(1)
function. cos, dcos, ccos: Fortran cosine intrinsic . . . . . cos(3F)
cd: change working directory. . . . . cd(1)
commentary of an SCCS delta. cdc: change the delta . . . . . cdc(1)
ceiling, remainder,/ floor, ceil, fmod, fabs: floor, . . . . . floor(3M)
/ceil, fmod, fabs: floor, ceiling, remainder, absolute/ . . . . . floor(3M)
intrinsic/ exp, dexp, cexp: Fortran exponential . . . . . exp(3F)

| | | |
|---|---|---|
| | cflow: generate C flow graph. . . . . | cflow(1) |
| delta: make a delta | (change) to an SCCS file. . . . . | delta(1) |
| pipe: create an interprocess | channel. . . . . | pipe(2) |
| /dble, cmplx, dcmplx, ichar, | char: explicit Fortran type/ . . . . . | ftype(3F) |
| stream. ungetc: push | character back into input . . . . . | ungetc(3S) |
| and neqn. eqnchar: special | character definitions for eqn . . . . . | eqnchar(5) |
| user. cuserid: get | character login name of the . . . . . | cuserid(3S) |
| /getchar, fgetc, getw: get | character or word from a/ . . . . . | getc(3S) |
| /putchar, fputc, putw: put | character or word on a stream. . . . . | putc(3S) |
| ascii: map of ASCII | character set. . . . . | ascii(5) |
| style: analyze surface | characteristics of a document. . . . . | style(1) |
| prose: describe style | characteristics of text. . . . . | prose(1) |
| interpret ASA carriage control | characters. asa: . . . . . | asa(1) |
| _tolower, toascii: translate | characters. /_toupper, . . . . . | conv(3C) |
| iscntrl, isascii: classify | characters. /isprint, isgraph, . . . . . | ctype(3C) |
| tr: translate | characters. . . . . | tr(1) |
| | chbin: change bin assignment. . . . . | chbin(1) |
| directory. | chdir: change working . . . . . | chdir(2) |
| object files. m8look: | check and display m8.out . . . . . | m8look(1) |
| fcheck: | check for corrupt files. . . . . | fcheck(1) |
| conformance to/ cverify: | check Fortran programs for . . . . . | cverify(1) |
| punct, punctrules: | check punctuation and print/ . . . . . | punct(1) |
| file. ckfile: | check the contents of a object . . . . . | b16ckfile(1) |
| checknews: | check to see if user has news. . . . . | checknews(1) |
| constant-width text for/ ocw, | checkcw: prepare . . . . . | ocw(1) |
| text for nroff or/ eqn, neqn, | checkeq: format mathematical . . . . | eqn(1) |
| lint: a C program | checker. . . . . | lint(1) |
| document compatibility | checker. /sroff/MM nroff/MM . . . . | mmlint(1) |
| systems processed by fsck. | checklist: list of file . . . . . | checklist(4) |
| formatted with the/ mm, osdd, | checkmm: print/check documents . . . | mm(1) |
| user has news. | checknews: check to see if . . . . . | checknews(1) |
| file for readnews and | checknews. /information . . . . . | newsrc(5) |
| file. sum: print | checksum and block count of a . . . . | sum(1) |
| chess: the game of | chess. . . . . | chess(6) |
| | chess: the game of chess. . . . . | chess(6) |
| | chg: directory comparison. . . . . | chg(1) |
| chown, | chgrp: change owner or group. . . . | chown(1) |
| times: get process and | child process times. . . . . | times(2) |
| terminate. wait: wait for | child process to stop or . . . . . | wait(2) |
| | chmod: change mode. . . . . | chmod(1) |
| | chmod: change mode of file. . . . . | chmod(2) |
| of a file. | chown: change owner and group . . . . | chown(2) |
| group. | chown, chgrp: change owner or . . . . | chown(1) |
| | chroot: change root directory. . . . . | chroot(2) |
| mwp: macros for formatting | Circuit Descriptions. . . . . | mwp(5) |
| a object file. | ckfile: check the contents of . . . . . | b16ckfile(1) |
| isgraph, iscntrl, isascii: | classify characters. /isprint, . . . . . | ctype(3C) |
| status/ ferror, feof, | clearerr, fileno: stream . . . . . | ferror(3S) |
| alarm: set a process alarm | clock. . . . . | alarm(2) |
| | clock: report CPU time used. . . . . | clock(3C) |
| logarithm/ log, alog, dlog, | clog: Fortran natural . . . . . | log(3F) |
| ldclose, ldaclose: | close a common object file. . . . . | ldclose(3X) |
| close: | close a file descriptor. . . . . | close(2) |
| descriptor. | close: close a file . . . . . | close(2) |
| fclose, fflush: | close or flush a stream. . . . . | fclose(3S) |
| | cmp: compare two files. . . . . | cmp(1) |
| /real, float, sngl, dble, | cmplx, dcmplx, ichar, char:/ . . . . . | ftype(3F) |
| computer. | co: connect to another . . . . . | co(1C) |

line-feeds. col: filter reverse . . . . . col(1)
information. usors: collect UNIX response time . . . . . usors(1)
comb: combine SCCS deltas. . . . . comb(1)
comb: combine SCCS deltas. . . . . comb(1)
common to two sorted files. comm: select or reject lines . . . . . comm(1)
nice: run a command at low priority. . . . . nice(1)
env: set environment for command execution. . . . . env(1)
uux: UNIX-to-UNIX system command execution. . . . . uux(1C)
system: issue a shell command from Fortran. . . . . system(3F)
quits. nohup: run a command immune to hangups and . . . nohup(1)
net: execute a command on the PCL network. . . . net(1C)
getopt: parse command options. . . . . getopt(1)
/shell, the standard/restricted command programming language. . . . sh(1)
and system/ timex: time a command; report process data . . . . . timex(1)
system: issue a shell command. . . . . system(3S)
test: condition evaluation command. . . . . test(1)
time: time a command. . . . . time(1)
argument list(s) and execute command. xargs: construct . . . . . xargs(1)
getarg: return Fortran command-line argument. . . . . getarg(3F)
intro: introduction to commands and application/ . . . . . intro(1)
of Writer's Workbench system commands and functions. /table . . . . wwbinfo(1)
at, batch: execute commands at a later time. . . . . at(1)
Writer's Workbench system commands for a topic. /print . . . . . wwbhelp(1)
embedded text formatting commands. format: invoke . . . . . format(1)
access graphical and numerical commands. graphics: . . . . . graphics(1G)
network useful with graphical commands. stat: statistical . . . . . stat(1G)
getpwcom, putpwcom: manipulate comment field in password file/ . . . . getpwcom(3X)
cdc: change the delta commentary of an SCCS delta. . . . cdc(1)
gripe: mail comments to UNIX counseling. . . . gripe.ho(1)
ar: common archive file format. . . . . ar(4)
/archive files from PDP-11 to common archive format. . . . . arcv.pdp(1)
editor output. a.out: common assembler and link . . . . . a.out(4)
as: common assembler. . . . . as(1)
object and archive files to common formats. /convert . . . . . convert(1)
log10, alog10, dlog10: Fortran common logarithm intrinsic/ . . . . . log10(3F)
routines. ldfcn: common object file access . . . . . ldfcn(4)
ldopen, ldaopen: open a common object file for/ . . . . . ldopen(3X)
ldclose, ldaclose: close a common object file. . . . . ldclose(3X)
read the file header of a common object file. ldfhread: . . . . . ldfhread(3X)
/retrieve symbol name for common object file. . . . . ldgetname(3X)
seek to line number of a common object file. /ldnlseek: . . . . . ldlseek(3X)
seek to the symbol table of a common object file. ldtbseek: . . . . . ldtbseek(3X)
line number entries in a common object file. linenum: . . . . . linenum(4)
nm: print name list of common object file. . . . . nm(1)
relocation information for a common object file. reloc: . . . . . reloc(4)
scnhdr: section header for a common object file. . . . . scnhdr(4)
line number information from a common object file. /and . . . . . strip(1)
table format. syms: common object file symbol . . . . . syms(4)
filehdr: file header for common object files. . . . . filehdr(4)
ld: link editor for common object files. . . . . ld(1)
size: print section sizes of common object files. . . . . size(1)
comm: select or reject lines common to two sorted files. . . . . comm(1)
ipcs: report inter-process communication facilities/ . . . . . ipcs(1)
ins: inter-system communication. . . . . ins(1)
ftok: standard interprocess communication package. . . . . stdipc(3C)
/sets the registers of the communications interface/ . . . . . un53ctl(1C)
diff: differential file comparator. . . . . diff(1)
histories across/ syscompare: compare response-time . . . . . syscompare(1)

or more texts. match: compare style tables from two . . . . . match(1)
cmp: compare two files. . . . . cmp(1)
SCCS file. sccsdiff: compare two versions of an . . . . . sccsdiff(1)
lge, lgt, lle, llt: string comparision intrinsic/ . . . . . strcmp(3F)
chg: directory comparison. . . . . chg(1)
diff3: 3-way differential file comparison. . . . . diff3(1)
dircmp: directory comparison. . . . . dircmp(1)
/sroff/MM nroff/MM document compatibility checker. . . . . mmlint(1)
expression. regcmp, regex: compile and execute regular . . . . . regcmp(3X)
regexp: regular expression compile and match routines. . . . . regexp(5)
regcmp: regular expression compile. . . . . regcmp(1)
term: format of compiled term file. . . . . term(4)
cc: Basic-16 C compiler. . . . . b16cc(1)
cc, pcc: C compiler. . . . . cc(1)
f77: Fortran 77 compiler. . . . . f77(1)
programs. scc: C compiler for stand-alone . . . . . scc(1)
Microprocessor. m8cc: C compiler for the BELLMAC-8 . . . . m8cc(1)
p8cc: portable BELLMAC-8 C compiler. . . . . p8cc(1)
yacc: yet another compiler-compiler. . . . . yacc(1)
modest-sized programs. bs: a compiler/interpreter for . . . . . bs(1)
erf, erfc: error function and complementary error function. . . . erf(3M)
wait: await completion of process. . . . . wait(1)
Fortran imaginary part of complex argument. /dimag: . . . . . aimag(3F)
conjg, dconjg: Fortran complex conjugate intrinsic/ . . . . . conjg(3F)
cprs: compress an IS25 object file. . . . . b16cprs(1)
cprs: compress an IS25 object file. . . . . cprs(1)
pack, pcat, unpack: compress and expand files. . . . . pack(1)
table entry of a/ ldtbindex: compute the index of a symbol . . . . ldtbindex(3X)
co: connect to another computer. . . . . co(1C)
cat: concatenate and print files. . . . . cat(1)
test: condition evaluation command. . . . . test(1)
diskcnfg: system disk drive configuration. . . . . diskcnfg(5)
/b16sts target machine configuration file generator. . . . . b16config(1)
/check Fortran programs for conformance to PFORT. . . . . cverify(1)
conjugate intrinsic function. conjg, dconjg: Fortran complex . . . . conjg(3F)
conjg, dconjg: Fortran complex conjugate intrinsic function. . . . . conjg(3F)
co: connect to another computer. . . . . co(1C)
an out-going terminal line connection. dial: establish . . . . . dial(3C)
report and interactive status console. rjestat: RJE status . . . . . rjestat(1C)
math: math functions and constants. . . . . math(5)
otroff. ocw, checkcw: prepare constant-width text for . . . . . ocw(1)
execute command. xargs: construct argument list(s) and . . . . xargs(1)
nroff/troff, tbl, and eqn constructs. deroff: remove . . . . . deroff(1)
ckfile: check the contents of a object file. . . . . b16ckfile(1)
ls: list contents of directory. . . . . ls(1)
toc: graphical table of contents routines. . . . . toc(1G)
csplit: context split. . . . . csplit(1)
asa: interpret ASA carriage control characters. . . . . asa(1)
ioctl: control device. . . . . ioctl(2)
fcntl: file control. . . . . fcntl(2)
msgctl: message control operations. . . . . msgctl(2)
semctl: semaphore control operations. . . . . semctl(2)
shmctl: shared memory control operations. . . . . shmctl(2)
fcntl: file control options. . . . . fcntl(5)
uucp status inquiry and job control. uustat: . . . . . uustat(1C)
vc: version control. . . . . vc(1)
Converter. conv: Basic-16 SGS Object File . . . . b16conv(1)
terminals. term: conventional names for . . . . . term(5)

char: explicit Fortran type conversion. /dcmplx, ichar, . . . . . ftype(3F)
units: conversion program. . . . . units(1)
aetab, eatab: ASCII to EBCDIC conversion tables. . . . . aetab(3)
dd: convert and copy a file. . . . . dd(1)
PDP-11 to common/ arcv: convert archive files from . . . . . arcv.pdp(1)
atsmm: convert ATS to MM. . . . . atsmm(1)
hexadecimal format. b16hx: Convert b16a.out file to . . . . . b16hx(1)
microcomputer object/ m4hx: Convert BELLMAC-4 . . . . . m4hx(1)
microprocessor load/ m8hx: Convert BELLMAC-8 . . . . . m8hx(1)
integers and/ l3tol, ltol3: convert between 3-byte . . . . . l3tol(3C)
and base-64 ASCII/ a64l, l64a: convert between long integer . . . . . a64l(3C)
archive files to common/ convert: convert object and . . . . . convert(1)
/gmtime, asctime, tzset: convert date and time to/ . . . . . ctime(3C)
to string. ecvt, fcvt, gcvt: convert floating-point number . . . . . ecvt(3C)
scanf, fscanf, sscanf: convert formatted input. . . . . scanf(3S)
files to common/ convert: convert object and archive . . . . . convert(1)
strtod, atof: convert string to/ . . . . . strtod(3C)
strtol, atol, atoi: convert string to integer. . . . . strtol(3C)
ASCII. getdate: convert time and date from . . . . . getdate(3X)
conv: Basic-16 SGS Object File Converter. . . . . b16conv(1)
imacv: IMAGE Data Base Converter. . . . . imacv(1G)
microcomputer boolean/ m4pb: Converts BELLMAC-4 . . . . . m4pb(1)
hexadecimal. hex, unhex: convert/unconvert data to . . . . . hex(1)
dd: convert and copy a file. . . . . dd(1)
another. copyfile: copy a file from one place to . . . . . copyfile(3X)
cpio: copy file archives in and out. . . . . cpio(1)
cpx: copy files exactly. . . . . cpx(1)
cp, ln, mv: copy, link or move files. . . . . cp(1)
getpwcpy: make a copy of a password file entry. . . . . getpwcpy(3X)
UNIX system to UNIX system copy. uucp, uulog, uuname: . . . . . uucp(1C)
UNIX-to-UNIX system file copy. uuto, uupick: public . . . . . uuto(1C)
place to another. copyfile: copy a file from one . . . . . copyfile(3X)
file. core: format of core image . . . . . core(4)
core: format of core image file. . . . . core(4)
spelltell: find the correct spelling of a word. . . . . spelltell(1)
/print information about correct usage of words. . . . . worduse(1)
findi: find file names corresponding to inode/ . . . . . findi(1)
fcheck: check for corrupt files. . . . . fcheck(1)
cosine intrinsic function. cos, dcos, ccos: Fortran . . . . . cos(3F)
atan2: trigonometric/ sin, cos, tan, asin, acos, atan, . . . . . trig(3M)
hyperbolic cosine intrinsic/ cosh, dcosh: Fortran . . . . . cosh(3F)
functions. sinh, cosh, tanh: hyperbolic . . . . . sinh(3M)
cos, dcos, ccos: Fortran cosine intrinsic function. . . . . cos(3F)
/dcosh: Fortran hyperbolic cosine intrinsic function. . . . . cosh(3F)
gripe: mail comments to UNIX counseling. . . . . gripe.ho(1)
sum: print checksum and block count of a file. . . . . sum(1)
wc: word count. . . . . wc(1)
syl: syllable counter. . . . . syl(1)
files. cp, ln, mv: copy, link or move . . . . . cp(1)
cpio: format of cpio archive. . . . . cpio(4)
and out. cpio: copy file archives in . . . . . cpio(1)
cpio: format of cpio archive. . . . . cpio(4)
File Transfer Facility for CP/M Terminals. /Remote . . . . . umodem(1)
preprocessor. cpp: the C language . . . . . cpp(1)
file. cprs: compress an IS25 object . . . . . b16cprs(1)
file. cprs: compress an IS25 object . . . . . cprs(1)
clock: report CPU time used. . . . . clock(3C)
cpx: copy files exactly. . . . . cpx(1)

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|---|---|---|
| craps: the game of | craps. | craps(6) |
| | craps: the game of craps. | craps(6) |
| dialect. | cratfor: rational Fortran | cratfor(1) |
| execution. clsend: create a | Cray-1 job and submit it for | clsend(1) |
| rewrite an existing one. | creat: create a new file or | creat(2) |
| it for execution. clsend: | create a Cray-1 job and submit | clsend(1) |
| file. tmpnam, tempnam: | create a name for a temporary | tmpnam(3S) |
| an existing one. creat: | create a new file or rewrite | creat(2) |
| fork: | create a new process. | fork(2) |
| tmpfile: | create a temporary file. | tmpfile(3S) |
| channel. pipe: | create an interprocess | pipe(2) |
| files. admin: | create and administer SCCS | admin(1) |
| with no existing/ b16login: | create login process on a port | b16login(1) |
| umask: set and get file | creation mask. | umask(2) |
| cxref: generate C program | cross-reference. | cxref(1) |
| macro files. macref: produce | cross-reference listing of | macref(1) |
| optimization package. curses: | CRT screen handling and | curses(3X) |
| functions. fixit: | CRT terminal editing | fixit(1) |
| pgr: pager for | crt terminals. | pgr(1) |
| | crypt: encode/decode. | crypt(1) |
| generate DES encryption. | crypt, setkey, encrypt: | crypt(3C) |
| function. sin, dsin, | csin: Fortran sine intrinsic | sin(3F) |
| | csplit: context split. | csplit(1) |
| intrinsic/ sqrt, dsqrt, | csqrt: Fortran square root | sqrt(3F) |
| programs. | cstruct: structure Fortran | cstruct(1) |
| terminal. | ct: spawn getty to a remote | ct(1C) |
| for terminal. | ctermid: generate file name | ctermid(3S) |
| asctime, tzset: convert date/ | ctime, localtime, gmtime, | ctime(3C) |
| | ctrace: C program debugger. | ctrace(1) |
| | cu: call another UNIX system. | cu(1C) |
| | cu: call another UNIX system. | cu.ih(1C) |
| ttt, | cubic: tic-tac-toe. | ttt(6) |
| activity. sact: print | current SCCS file editing | sact(1) |
| syslist: modify or echo | current system list. | syslist(1) |
| uname: print name of | current UNIX system. | uname(1) |
| uname: get name of | current UNIX system. | uname(2) |
| get the login name of the | current user. logname: | logdata(3X) |
| slot in the utmp file of the | current user. /find the | ttyslot(3C) |
| getcwd: get path-name of | current working directory. | getcwd(3C) |
| and optimization package. | curses: CRT screen handling | curses(3X) |
| spline: interpolate smooth | curve. | spline(1G) |
| name of the user. | cuserid: get character login | cuserid(3S) |
| of each line of a file. | cut: cut out selected fields | cut(1) |
| each line of a file. cut: | cut out selected fields of | cut(1) |
| programs for conformance to/ | cverify: check Fortran | cverify(1) |
| cross-reference. | cxref: generate C program | cxref(1) |
| absolute value. abs, iabs, | dabs, cabs, zabs: Fortran | abs(3F) |
| intrinsic function. acos, | dacos: Fortran arccosine | acos(3F) |
| summarize: summarize USORS | daily data and maintain files. | summarize(5) |
| daysum: summarize USORS | daily response time/ | daysum(1) |
| dayplot: plot USORS | daily response time/ | dayplot(1) |
| phototypesetter filter. | daps, di10: Autologic APS-5 | daps(1) |
| /handle special functions of | DASI 300 and 300s terminals. | 300(1) |
| special functions of the | DASI 450 terminal. /handle | 450(1) |
| intrinsic function. asin, | dasin: Fortran arcsine | asin(3F) |
| /summarize USORS daily | data and maintain files. | summarize(5) |
| /time a command; report process | data and system activity. | timex(1) |
| imacv: IMAGE | Data Base Converter. | imacv(1G) |

terminfo: terminal capability data base. . . . . terminfo(4)
ifetch: fetch data from IBM. . . . . ifetch(1)
m4receive: Reads m4we input data from tape. . . . . m4receive(1)
ttyin: input data from terminal. . . . . ttyin(1)
ufetch: fetch data from Univac. . . . . ufetch(1)
/sgetl: access long integer data in a machine-independent/ . . . . sputl(3X)
sar: seek and read data in kernel memory. . . . . sar(3X)
plock: lock process, text, or data in memory. . . . . plock(2)
prof: display profile data. . . . . prof(1)
call. stat: data returned by stat system . . . . . stat(5)
brk, sbrk: change data segment space allocation. . . . . brk(2)
hex, unhex: convert/unconvert data to hexadecimal. . . . . hex(1)
m4send: Writes m4we input data to tape. . . . . m4send(1)
types: primitive system data types. . . . . types(5)
join: relational database operator. . . . . join(1)
tput: query terminfo database. . . . . tput(1)
intrinsic function. atan, datan: Fortran arctangent . . . . . atan(3F)
intrinsic function. atan2, datan2: Fortran arctangent . . . . . atan2(3F)
/asctime, tzset: convert date and time to string. . . . . ctime(3C)
date: print and set the date. . . . . date(1)
getdate: convert time and date from ASCII. . . . . getdate(3X)
date: print and set the date. . . . . date(1)
response time percentiles. dayplot: plot USORS daily . . . . . dayplot(1)
response time distributions. daysum: summarize USORS daily . . . daysum(1)
/idint, real, float, sngl, dble, cmplx, dcmplx, ichar,/ . . . . . ftype(3F)
dc: desk calculator. . . . . dc(1)
/float, sngl, dble, cmplx, dcmplx, ichar, char: explicit/ . . . . . ftype(3F)
conjugate intrinsic/ conjg, dconjg: Fortran complex . . . . . conjg(3F)
intrinsic function. cos, dcos, ccos: Fortran cosine . . . . . cos(3F)
cosine intrinsic/ cosh, dcosh: Fortran hyperbolic . . . . . cosh(3F)
dd: convert and copy a file. . . . . dd(1)
difference intrinsic/ dim, ddim, idim: positive . . . . . dim(3F)
adb: absolute debugger. . . . . adb(1)
ctrace: C program debugger. . . . . ctrace(1)
Development System symbolic debugger. m4mate: BELLMAC-4 . . . m4mate(1)
Development System Symbolic Debugger. m8db: BELLMAC-8 . . . m8db(1)
sdb: symbolic debugger. . . . . sdb(1)
mdef: execute definition phase of MICA. . . . . mdef(1)
eqnchar: special character definitions for eqn and neqn. . . . . eqnchar(5)
group. addgrp,delgrp: add and delete members to/from a . . . . . addgrp(1)
names. basename, dirname: deliver portions of path . . . . . basename(1)
file. tail: deliver the last part of a . . . . . tail(1)
delta commentary of an SCCS delta. cdc: change the . . . . . cdc(1)
file. delta: make a delta (change) to an SCCS . . . . . delta(1)
delta. cdc: change the delta commentary of an SCCS . . . . cdc(1)
rmdel: remove a delta from an SCCS file. . . . . rmdel(1)
to an SCCS file. delta: make a delta (change) . . . . . delta(1)
comb: combine SCCS deltas. . . . . comb(1)
mesg: permit or deny messages. . . . . mesg(1)
tbl, and eqn constructs. deroff: remove nroff/troff, . . . . . deroff(1)
setkey, encrypt: generate DES encryption. crypt, . . . . . crypt(3C)
for files. descend: descend a directory looking . . . . . descend(3)
looking for files. descend: descend a directory . . . . . descend(3)
of text. prose: describe style characteristics . . . . . prose(1)
system: format of 3B20S system description file. . . . . system(4)
device-independent/ font: description files for . . . . . font(5)
language. troff: description of output . . . . . troff(5)
/microcomputer boolean description of user PLA. . . . . m4pb(1)

macros for formatting Circuit Descriptions. mwp: . . . . . mwp(5)
close: close a file descriptor. . . . . close(2)
dup: duplicate an open file descriptor. . . . . dup(2)
dc: desk calculator. . . . . dc(1)
x25hlnk, x25dlnk: halt or detach a BX.25 link. . . . . x25hlnk(3C)
file. access: determine accessibility of a . . . . . access(2)
file: determine file type. . . . . file(1)
master: master device information table. . . . . master.dec(4)
master: master device information table. . . . . master.u3b(4)
ioctl: control device. . . . . ioctl(2)
troff output to local prism device. prism: send . . . . . prism(1C)
/tekset, td: graphical device routines and filters. . . . . gdev(1G)
font: description files for device-independent troff. . . . . font(5)
the/ apsend: send output from device-independent troff to . . . . . apsend(1)
exponential intrinsic/ exp, dexp, cexp: Fortran . . . . . exp(3F)
phototypesetter filter. daps, di10: Autologic APS-5 . . . . . daps(1)
didoc: generate DI-3000 document. . . . . didoc(1)
grx: DI-3000 graphics interface. . . . . grx(1)
interface. mfsend: batch DI-3000 graphics metafile . . . . . mfsend(1)
interface. mfx: DI-3000 Metafile Translator . . . . . mfx(1)
terminal line connection. dial: establish an out-going . . . . . dial(3C)
cratfor: rational Fortran dialect. . . . . cratfor(1)
ratfor: rational Fortran dialect. . . . . ratfor(1)
diction, spellwwb, or sexist/ dictadd: add phrases to user's . . . . . dictadd(1)
and suggest alternatives. diction: print wordy sentences . . . . . diction(1)
dictadd: add phrases to user's diction, spellwwb, or sexist/ . . . . . dictadd(1)
diction, spellwwb, or sexist dictionary. /phrases to user's . . . . . dictadd(1)
add words to user spelling dictionary. spelladd: . . . . . spelladd(1)
document. didoc: generate DI-3000 . . . . . didoc(1)
bdiff: big diff. . . . . bdiff(1)
comparator. diff: differential file . . . . . diff(1)
comparison. diff3: 3-way differential file . . . . . diff3(1)
dim, ddim, idim: positive difference intrinsic/ . . . . . dim(3F)
sdiff: side-by-side difference program. . . . . sdiff(1)
diffmk: mark differences between files. . . . . diffmk(1)
diff: differential file comparator. . . . . diff(1)
diff3: 3-way differential file comparison. . . . . diff3(1)
between files. diffmk: mark differences . . . . . diffmk(1)
difference intrinsic/ dim, ddim, idim: positive . . . . . dim(3F)
of complex argument. aimag, dimag: Fortran imaginary part . . . . aimag(3F)
intrinsic function. aint, dint: Fortran integer part . . . . . aint(3F)
dir: format of directories. . . . . dir(4)
dircmp: directory comparison. . . . . dircmp(1)
dir: format of directories. . . . . dir(4)
rm, rmdir: remove files or directories. . . . . rm(1)
cd: change working directory. . . . . cd(1)
chdir: change working directory. . . . . chdir(2)
chroot: change root directory. . . . . chroot(2)
chg: directory comparison. . . . . chg(1)
dircmp: directory comparison. . . . . dircmp(1)
unlink: remove directory entry. . . . . unlink(2)
path-name of current working directory. getcwd: get . . . . . getcwd(3C)
logdir: get login directory. . . . . logdir(1)
descend: descend a directory looking for files. . . . . descend(3)
ls: list contents of directory. . . . . ls(1)
mkdir: make a directory. . . . . mkdir(1)
pwd: working directory name. . . . . pwd(1)
ordinary file. mknod: make a directory, or a special or . . . . . mknod(2)

Basic-16. paths: directory path names for . . . . . paths(4)
path names. basename, dirname: deliver portions of . . . . . basename(1)
dis: 3B20S disassembler. . . . . dis(1)
dis: Basic-16 Disassembler. . . . . b16dis(1)
printers. enable, disable: enable/disable LP . . . . . enable(1)
acct: enable or disable process accounting. . . . . acct(2)
for the C/ p8list: BELLMAC-8 dis-assembler and line lister . . . . . p8list(1)
dis: Basic-16 Disassembler. . . . . b16dis(1)
dis: 3B20S disassembler. . . . . dis(1)
BELLMAC-8 microprocessor dis-assembler. m8list: . . . . . m8list(1)
UNIXTm. tabs: discussion of tab handling on . . . . . tabs(5)
diskcnfg: system disk drive configuration. . . . . diskcnfg(5)
du: summarize disk usage. . . . . du(1)
configuration. diskcnfg: system disk drive . . . . . diskcnfg(5)
vi: screen-oriented (visual) display editor based on ex. . . . . vi(1)
and Exception/ status: Display for the Unix Status . . . . . status(1)
m8look: check and display m8.out object files. . . . . m8look(1)
prof: display profile data. . . . . prof(1)
sp: filter for display terminals. . . . . sp(1)
hypot: Euclidean distance function. . . . . hypot(3M)
/lcong48: generate uniformly distributed pseudo-random/ . . . . . drand48(3C)
USORS daily response time distributions. /summarize . . . . . daysum(1)
logarithm/ log, alog, dlog, clog: Fortran natural . . . . . log(3F)
logarithm/ log10, alog10, dlog10: Fortran common . . . . . log10(3F)
max, max0, amax0, max1, amax1, dmax1: Fortran maximum-value/ . . . max(3F)
min, min0, amin0, min1, amin1, dmin1: Fortran minimum-value/ . . . min(3F)
intrinsic/ mod, amod, dmod: Fortran remaindering . . . . . mod(3F)
nearest integer/ anint, dnint, nint, idnint: Fortran . . . . . round(3F)
analyze the abstractness of a document. abst: . . . . . abst(1)
mmlint: sroff/MM nroff/MM document compatibility/ . . . . . mmlint(1)
didoc: generate DI-3000 document. . . . . didoc(1)
ats: transform pseudo-ats document for nroff/MM. . . . . ats(1)
imadoc: generate IMAGE document. . . . . imadoc(1G)
show the organization of a document. org: . . . . . org(1)
ptroff: typeset document. . . . . ptroff(1)
itds: Send document requests to ITDS. . . . . itds(1)
surface characteristics of a document. style: analyze . . . . . style(1)
parch: transfer ATS archive document to UNIX. . . . . parch(1C)
topic: find the topic of a document. . . . . topic(1)
pmmt: typeset document with MM and ptroff. . . . . pmmt(1)
man: Print on-line documentation for Basic-16. . . . . b16man(1)
dx9700: prepare troff documents for the Xerox 9700/ . . . . dx9700(1)
printer. x9700: prepare nroff documents for the Xerox 9700 . . . . x9700(1)
mm, osdd, checkmm: print/check documents formatted with the/ . . . . mm(1)
macro package for formatting documents. mm: the MM . . . . . mm(5)
macro package for formatting documents. /the OSDD adapter . . . mosd(5)
printer. mmx: print documents on the Xerox 9700 . . . . . mmx(1)
slides. mmt, mvt: typeset documents, viewgraphs, and . . . . . mmt(1)
exploring The Dungeons of Doom (Version 9). /rogue: . . . . . rogue(6)
double: double word finder. . . . . double(1)
intrinsic function. dprod: double precision product . . . . . dprod(3F)
double: double word finder. . . . . double(1)
/atof: convert string to double-precision number. . . . . strtod(3C)
product intrinsic function. dprod: double precision . . . . . dprod(3F)
reversi: a game of dramatic reversals. . . . . reversi(6)
nrand48, mrand48, jrand48,/ drand48, erand48, lrand48, . . . . . drand48(3C)
graph: draw a graph. . . . . graph(1G)
pic: troff preprocessor for drawing simple pictures. . . . . pic(1)

arithmetic: provide drill in number facts. . . . . arithmetic(6)
diskcnfg: system disk drive configuration. . . . . diskcnfg(5)
transfer-of-sign/ sign, isign, dsign: Fortran . . . . . sign(3F)
intrinsic function. sin, dsin, csin: Fortran sine . . . . . sin(3F)
intrinsic function. sinh, dsinh: Fortran hyperbolic sine . . . . . sinh(3F)
root intrinsic/ sqrt, dsqrt, csqrt: Fortran square . . . . . sqrt(3F)
intrinsic function. tan, dtan: Fortran tangent . . . . . tan(3F)
tangent intrinsic/ tanh, dtanh: Fortran hyperbolic . . . . . tanh(3F)
du: summarize disk usage. . . . . du(1)
an object file. dump: dump selected parts of . . . . . dump(1)
an object file. dump: dumps selected parts of . . . . b16dump(1)
od: octal dump. . . . . od(1)
object file. dump: dump selected parts of an . . . . . dump(1)
object file. dump: dumps selected parts of an . . . . . b16dump(1)
super rogue: exploring The Dungeons of Doom (Version 9). . . . . rogue(6)
descriptor. dup: duplicate an open file . . . . . dup(2)
descriptor. dup: duplicate an open file . . . . . dup(2)
documents for the Xerox 9700/ dx9700: prepare troff . . . . . dx9700(1)
conversion tables. aetab, eatab: ASCII to EBCDIC . . . . . aetab(3)
aetab, eatab: ASCII to EBCDIC conversion tables. . . . . aetab(3)
echo: echo arguments. . . . . echo(1)
syslist: modify or echo current system list. . . . . syslist(1)
echo: echo arguments. . . . . echo(1)
floating-point number to/ ecvt, fcvt, gcvt: convert . . . . . ecvt(3C)
ed, red: text editor. . . . . ed(1)
program. end, etext, edata: last locations in . . . . . end(3C)
ex for casual users). edit: text editor (variant of . . . . . edit(1)
sact: print current SCCS file editing activity. . . . . sact(1)
fixit: CRT terminal editing functions. . . . . fixit(1)
/(visual) display editor based on ex. . . . . vi(1)
ed, red: text editor. . . . . ed(1)
ex: text editor. . . . . ex(1)
ld: link editor for Basic-16. . . . . b16ld(1)
microprocessor. m8ld: link editor for BELLMAC-8 . . . . . m8ld(1)
m8ol: overlay link editor for BELLMAC-8/ . . . . . m8ol(1)
files. ld: link editor for common object . . . . . ld(1)
se: screen editor for video terminals. . . . . se(1)
ged: graphical editor. . . . . ged(1G)
image: interactive graphic editor. . . . . image(1G)
imale: IMAGE Library Editor. . . . . imale(1G)
ld: link editor. . . . . ld.pdp(1)
common assembler and link editor output. a.out: . . . . . a.out(4)
PDP-11 assembler and link editor output. a.out: . . . . . a.out.pdp(4)
sed: stream editor. . . . . sed(1)
ulib: uniform remote library editor. . . . . ulib(1)
casual users). edit: text editor (variant of ex for . . . . . edit(1)
/getegid: get real and/or effective user and group IDs. . . . . getuid(2)
Language. efl: Extended Fortran . . . . . efl(1)
fsplit: split f77, ratfor, or efl files. . . . . fsplit(1)
for a pattern. grep, egrep, fgrep: search a file . . . . . grep(1)
commands. format: invoke embedded text formatting . . . . . format(1)
enable/disable LP printers. enable, disable: . . . . . enable(1)
accounting. acct: enable or disable process . . . . . acct(2)
enable, disable: enable/disable LP printers. . . . . enable(1)
crypt: encode/decode. . . . . crypt(1)
encryption. crypt, setkey, encrypt: generate DES . . . . . crypt(3C)
setkey, encrypt: generate DES encryption. crypt, . . . . . crypt(3C)
makekey: generate encryption key. . . . . makekey(1)

locations in program. end, etext, edata: last . . . . . end(3C)
/getgrgid, getgrnam, setgrent, endgrent, fgetgrent: get group/ . . . . getgrent(3C)
/getpwuid, getpwnam, setpwent, endpwent, fgetpwent: get/ . . . . . getpwent(3C)
utmp/ /pututline, setutent, endutent, utmpname: access . . . . . getut(3C)
trenter: enter a trouble report. . . . . trenter(1)
acc: print process accounting entries. . . . . acc(1)
nlist: get entries from name list. . . . . nlist(3C)
comment field in password file entries. /putpwcom: manipulate . . . . getpwcom(3X)
file. linenum: line number entries in a common object . . . . . linenum(4)
man, manprog: print entries in this manual. . . . . man(1)
man: macros for formatting entries in this manual. . . . . man(5)
/ldnrseek: seek to relocation entries of a section of a/ . . . . . ldrseek(3X)
/manipulate line number entries of an object file. . . . . ldlread(3X)
information for Remote Job Entry. /Record ACF2 access . . . . . cacf(1)
whois: returns password file entry for specified user-id. . . . . whois(1)
utmp, wtmp: utmp and wtmp entry formats. . . . . utmp(4)
fgetgrent: get group file entry. /setgrent, endgrent, . . . . . getgrent(3C)
make a copy of a password file entry. getpwcpy: . . . . . getpwcpy(3X)
fgetpwent: get password file entry. /setpwent, endpwent, . . . . . getpwent(3C)
utmpname: access utmp file entry. /setutent, endutent, . . . . . getut(3C)
the index of a symbol table entry of a file. /compute . . . . . ldtbindex(3X)
read an indexed symbol table entry of a file. ldtbread: . . . . . ldtbread(3X)
format and write a group file entry. putgrent: . . . . . putgrent(3X)
putpwent: write password file entry. . . . . putpwent(3C)
pwstat: format password file entry. . . . . pwstat(1)
for Basic-16 transfer vector entry. tv: structure . . . . . tv(4)
unlink: remove directory entry. . . . . unlink(2)
command execution. env: set environment for . . . . . env(1)
environ: user environment. . . . . environ(5)
profile: setting up an environment at login time. . . . . profile(4)
environ: user environment. . . . . environ(5)
execution. env: set environment for command . . . . . env(1)
getenv: return value for environment name. . . . . getenv(3C)
putenv: change or add value to environment. . . . . putenv(3C)
getenv: return Fortran environment variable. . . . . getenv(3F)
sky: obtain ephemerides. . . . . sky(6)
character definitions for eqn and neqn. /special . . . . . eqnchar(5)
remove nroff/troff, tbl, and eqn constructs. deroff: . . . . . deroff(1)
mathematical text for nroff/ eqn, neqn, checkeq: format . . . . . eqn(1)
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complementary error function. erf, erfc: error function and . . . . . erf(3M)
complementary error/ erf, erfc: error function and . . . . . erf(3M)
format. errfile: error-log file . . . . . errfile(4)
system error/ perror, errno, sys_errlist, sys_nerr: . . . . . perror(3C)
complementary/ erf, erfc: error function and . . . . . erf(3M)
function and complementary error function. /erfc: error . . . . . erf(3M)
sys_errlist, sys_nerr: system error messages. /errno, . . . . . perror(3C)
to system calls and error numbers. /introduction . . . . . intro(2)
matherr: error-handling function. . . . . matherr(3M)
errfile: error-log file format. . . . . errfile(4)
hashcheck: find spelling errors. /hashmake, spellin, . . . . . spell(1)
spellwwb: find spelling errors. . . . . spellwwb(1)
terminal line/ dial: establish an out-going . . . . . dial(3C)
in program. end, etext, edata: last locations . . . . . end(3C)
hypot: Euclidean distance function. . . . . hypot(3M)
expression. expr: evaluate arguments as an . . . . . expr(1)

test: condition evaluation command. . . . . test(1)
edit: text editor (variant of ex for casual users). . . . . edit(1)
ex: text editor. . . . . ex(1)
display editor based on ex. /screen-oriented (visual) . . . . . vi(1)
cpx: copy files exactly. . . . . cpx(1)
for the Unix Status and Exception Monitor. /Display . . . . . status(1)
execlp, execvp: execute a/ execl, execv, execle, execve, . . . . . exec(2)
execvp: execute/ execl, execv, execle, execve, execlp, . . . . . exec(2)
execl, execv, execle, execve, execlp, execvp: execute a/ . . . . . exec(2)
network. net: execute a command on the PCL . . . . net(1C)
execve, execlp, execvp: execute a file. /execle, . . . . . exec(2)
MICA. mass: execute assembly phase of . . . . . mass(1)
construct argument list(s) and execute command. xargs: . . . . . xargs(1)
time. at, batch: execute commands at a later . . . . . at(1)
MICA. mdef: execute definition phase of . . . . . mdef(1)
mlst: execute listing phase of MICA. . . . . mlst(1)
regcmp, regex: compile and execute regular expression. . . . . regcmp(3X)
a Cray-1 job and submit it for execution. clsend: create . . . . . clsend(1)
set environment for command execution. env: . . . . . env(1)
sleep: suspend execution for an interval. . . . . sleep(1)
sleep: suspend execution for interval. . . . . sleep(3C)
monitor: prepare execution profile. . . . . monitor(3C)
profil: execution time profile. . . . . profil(2)
UNIX-to-UNIX system command execution. uux: . . . . . uux(1C)
execvp: execute a/ execl, execv, execle, execve, execlp, . . . . . exec(2)
execute/ execl, execv, execle, execve, execlp, execvp: . . . . . exec(2)
/execv, execle, execve, execlp, execvp: execute a file. . . . . exec(2)
process on a port with no existing login process. /login . . . . . b16login(1)
a new file or rewrite an existing one. creat: create . . . . . creat(2)
process. exit, _exit: terminate . . . . . exit(2)
exit, _exit: terminate process. . . . . exit(2)
exponential intrinsic/ exp, dexp, cexp: Fortran . . . . . exp(3F)
exponential, logarithm,/ exp, log, log10, pow, sqrt: . . . . . exp(3M)
pcat, unpack: compress and expand files. pack, . . . . . pack(1)
cmplx, dcmplx, ichar, char: explicit Fortran type/ /dble, . . . . . ftype(3F)
(Version 9). super rogue: exploring The Dungeons of Doom . . . rogue(6)
exp, dexp, cexp: Fortran exponential intrinsic/ . . . . . exp(3F)
exp, log, log10, pow, sqrt: exponential, logarithm, power,/ . . . . exp(3M)
expression. expr: evaluate arguments as an . . . . expr(1)
routines. regexp: regular expression compile and match . . . . . regexp(5)
regcmp: regular expression compile. . . . . regcmp(1)
expr: evaluate arguments as an expression. . . . . expr(1)
compile and execute regular expression. regcmp, regex: . . . . . regcmp(3X)
efl: Extended Fortran Language. . . . . efl(1)
greek: graphics for the extended TTY-37 type-box. . . . . greek(5)
formatted input. extr: extract file from . . . . . extr(1)
input. extr: extract file from formatted . . . . . extr(1)
f77: Fortran 77 compiler. . . . . f77(1)
fsplit: split f77, ratfor, or efl files. . . . . fsplit(1)
remainder,/ floor, ceil, fmod, fabs: floor, ceiling, . . . . . floor(3M)
factor: factor a number. . . . . factor(1)
factor: factor a number. . . . . factor(1)
true, false: provide truth values. . . . . true(1)
data in a machine-independent fashion. /access long integer . . . . . sputl(3X)
/calloc, mallopt, mallinfo: fast main memory allocator. . . . . malloc(3X)
abort: generate an IOT fault. . . . . abort(3C)
files. fcheck: check for corrupt . . . . . fcheck(1)
a stream. fclose, fflush: close or flush . . . . . fclose(3S)

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|---|---|---|
| | fcntl: file control. | fcntl(2) |
| | fcntl: file control options. | fcntl(5) |
| floating-point number/ ecvt, | fcvt, gcvt: convert | ecvt(3C) |
| fopen, freopen, | fdopen: open a stream. | fopen(3S) |
| status inquiries. ferror, | feof, clearerr, fileno: stream | ferror(3S) |
| fileno: stream status/ | ferror, feof, clearerr, | ferror(3S) |
| ifetch: | fetch data from IBM. | ifetch(1) |
| ufetch: | fetch data from Univac. | ufetch(1) |
| stream. fclose, | fflush: close or flush a | fclose(3S) |
| word from a/ getc, getchar, | fgetc, getw: get character or | getc(3S) |
| /getgrnam, setgrent, endgrent, | fgetgrent: get group file/ | getgrent(3C) |
| /getpwnam, setpwent, endpwent, | fgetpwent: get password file/ | getpwent(3C) |
| stream. gets, | fgets: get a string from a | gets(3S) |
| pattern. grep, egrep, | fgrep: search a file for a | grep(1) |
| times. utime: set | file access and modification | utime(2) |
| ldfcn: common object | file access routines. | ldfcn(4) |
| determine accessibility of a | file. access: | access(2) |
| acro: find acronyms in a text | file. | acro(1) |
| hpio: HP 2645A terminal tape | file archiver. | hpio(1) |
| tar: tape | file archiver. | tar(1) |
| cpio: copy | file archives in and out. | cpio(1) |
| check the contents of a object | file. ckfile: | b16ckfile(1) |
| cprs: compress an IS25 object | file. | b16cprs(1) |
| selected parts of an object | file. dump: dumps | b16dump(1) |
| chmod: change mode of | file. | chmod(2) |
| change owner and group of a | file. chown: | chown(2) |
| diff: differential | file comparator. | diff(1) |
| diff3: 3-way differential | file comparison. | diff3(1) |
| fcntl: | file control. | fcntl(2) |
| fcntl: | file control options. | fcntl(5) |
| conv: Basic-16 SGS Object | File Converter. | b16conv(1) |
| public UNIX-to-UNIX system | file copy. uuto, uupick: | uuto(1C) |
| core: format of core image | file. | core(4) |
| cprs: compress an IS25 object | file. | cprs(1) |
| umask: set and get | file creation mask. | umask(2) |
| fields of each line of a | file. cut: cut out selected | cut(1) |
| dd: convert and copy a | file. | dd(1) |
| a delta (change) to an SCCS | file. delta: make | delta(1) |
| close: close a | file descriptor. | close(2) |
| dup: duplicate an open | file descriptor. | dup(2) |
| | file: determine file type. | file(1) |
| selected parts of an object | file. dump: dump | dump(1) |
| sact: print current SCCS | file editing activity. | sact(1) |
| comment field in password | file entries. /manipulate | getpwcom(3X) |
| whois: returns password | file entry for specified/ | whois(1) |
| endgrent, fgetgrent: get group | file entry. /setgrent, | getgrent(3C) |
| make a copy of a password | file entry. getpwcpy: | getpwcpy(3X) |
| fgetpwent: get password | file entry. /endpwent, | getpwent(3C) |
| utmpname: access utmp | file entry. /endutent, | getut(3C) |
| format and write a group | file entry. putgrent: | putgrent(3X) |
| putpwent: write password | file entry. | putpwent(3C) |
| pwstat: format password | file entry. | pwstat(1) |
| execlp, execvp: execute a | file. /execv, execle, execve, | exec(2) |
| grep, egrep, fgrep: search a | file for a pattern. | grep(1) |
| ldaopen: open a common object | file for reading. ldopen, | ldopen(3X) |
| newsrc: information | file for readnews and/ | newsrc(5) |
| acct: per-process accounting | file format. | acct(4) |
| ar: common archive | file format. | ar(4) |

ar: archive file format. . . . . ar.pdp(4)
a.out: Basic-16 object file format. . . . . b16a.out(4)
errfile: error-log file format. . . . . errfile(4)
pnch: file format for card images. . . . . pnch(4)
m4.out: BELLMAC-4 object file format. . . . . m4.out(4)
microprocessor object file format. /BELLMAC-8 . . . . . m8.out(4)
intro: introduction to file formats. . . . . intro(4)
extr: extract file from formatted input. . . . . extr(1)
another. copyfile: copy a file from one place to . . . . . copyfile(3X)
target machine configuration file generator. /b16sts . . . . . b16config(1)
get: get a version of an SCCS file. . . . . get(1)
retrieve recently written file. getback: . . . . . getback(1)
group: group file. . . . . group(4)
see: see what a file has in it. . . . . see(1)
object files. filehdr: file header for Basic-16 . . . . . filehdr.div(4)
files. filehdr: file header for common object . . . . filehdr(4)
file. ldfhread: read the file header of a common object . . . . ldfhread(3X)
ldohseek: seek to the optional file header of a file. . . . . ldohseek(3X)
split: split a file into pieces. . . . . split(1)
issue: issue identification file. . . . . issue(4)
of a member of an archive file. /read the header . . . . . ldahread(3X)
close a common object file. ldclose, ldaclose: . . . . . ldclose(3X)
file header of a common object file. ldfhread: read the . . . . . ldfhread(3X)
symbol name for common object file. ldgetname: retrieve . . . . . ldgetname(3X)
number entries of an object file. /manipulate line . . . . . ldlread(3X)
line number of a common object file. /ldnlseek: seek to . . . . . ldlseek(3X)
the optional file header of a file. ldohseek: seek to . . . . . ldohseek(3X)
entries of a section of a file. /seek to relocation . . . . . ldrseek(3X)
section header of a file. /read an indexed/named . . . . ldshread(3X)
an indexed/named section of a file. /ldnsseek: seek to . . . . . ldsseek(3X)
of a symbol table entry of a file. /compute the index . . . . . ldtbindex(3X)
symbol table entry of a file. /read an indexed . . . . . ldtbread(3X)
table of a common object file. /seek to the symbol . . . . . ldtbseek(3X)
entries in a common object file. linenum: line number . . . . . linenum(4)
link: link to a file. . . . . link(2)
listing from 3B20S object file. list: produce C source . . . . . list(1)
m8size: size of an object file. . . . . m8size(1)
or a special or ordinary file. /make a directory, . . . . . mknod(2)
ctermid: generate file name for terminal. . . . . ctermid(3S)
mktemp: make a unique file name. . . . . mktemp(3C)
inode numbers. findi: find file names corresponding to . . . . . findi(1)
change the format of a text file. newform: . . . . . newform(1)
name list of common object file. nm: print . . . . . nm(1)
/find the slot in the utmp file of the current user. . . . . ttyslot(3C)
one. creat: create a new file or rewrite an existing . . . . . creat(2)
passwd: password file. . . . . passwd(4)
or subsequent lines of one file. /lines of several files . . . . . paste(1)
soft-copy terminals. pg: file perusal filter for . . . . . pg(1)
/rewind, ftell: reposition a file pointer in a stream. . . . . fseek(3S)
lseek: move read/write file pointer. . . . . lseek(2)
prs: print an SCCS file. . . . . prs(1)
read: read from file. . . . . read(2)
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header for a common object file. scnhdr: section . . . . . scnhdr(4)
header for a Basic-16 object file. scnhdr: section . . . . . scnhdr.div(4)
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checksum and block count of a file. sum: print . . . . . sum(1)
syms: common object file symbol table format. . . . . syms(4)
volume. file system: format of system . . . . . fs(4)
mount: mount a file system. . . . . mount(2)
ustat: get file system statistics. . . . . ustat(2)
mnttab: mounted file system table. . . . . mnttab(4)
umount: unmount a file system. . . . . umount(2)
of 3B20S system description file. system: format . . . . . system(4)
fsck. checklist: list of file systems processed by . . . . . checklist(4)
deliver the last part of a file. tail: . . . . . tail(1)
term: format of compiled term file. . . . . term(4)
tmpfile: create a temporary file. . . . . tmpfile(3S)
create a name for a temporary file. tmpnam, tempnam: . . . . . tmpnam(3S)
BELLMAC-4 microcomputer object file to hex format. /Convert . . . . . m4hx(1)
b16hx: Convert b16a.out file to hexadecimal format. . . . . b16hx(1)
and modification times of a file. touch: update access . . . . . touch(1)
CP/M/ umodem: Remote File Transfer Facility for . . . . . umodem(1)
ftp: file transfer program. . . . . ftp(1C)
ftw: walk a file tree. . . . . ftw(3C)
file: determine file type. . . . . file(1)
undo a previous get of an SCCS file. unget: . . . . . unget(1)
report repeated lines in a file. uniq: . . . . . uniq(1)
val: validate SCCS file. . . . . val(1)
write: write on a file. . . . . write(2)
umask: set file-creation mode mask. . . . . umask(1)
Basic-16 object files. filehdr: file header for . . . . . filehdr.div(4)
common object files. filehdr: file header for . . . . . filehdr(4)
ferror, feof, clearerr, fileno: stream status/ . . . . . ferror(3S)
and print process accounting file(s). acctcom: search . . . . . acctcom(1)
create and administer SCCS files. admin: . . . . . admin(1)
send, gath: gather files and/or submit RJE jobs. . . . . send(1C)
archive: archive and retrieve files. . . . . archive.mh(1)
cat: concatenate and print files. . . . . cat(1)
cmp: compare two files. . . . . cmp(1)
lines common to two sorted files. comm: select or reject . . . . . comm(1)
cp, ln, mv: copy, link or move files. . . . . cp(1)
a directory looking for files. descend: descend . . . . . descend(3)
mark differences between files. diffmk: . . . . . diffmk(1)
cpx: copy files exactly. . . . . cpx(1)
fcheck: check for corrupt files. . . . . fcheck(1)
file header for common object files. filehdr: . . . . . filehdr(4)
header for Basic-16 object files. filehdr: file . . . . . filehdr.div(4)
find: find files. . . . . find(1)
troff. font: description files for device-independent . . . . . font(5)
send files to and retrieve files from archives. archive: . . . . . archive.div(1)
archive/ arcv: convert archive files from PDP-11 to common . . . . . arcv.pdp(1)
fsend: send files. . . . . fsend(1C)
format specification in text files. fspec: . . . . . fspec(4)
split f77, ratfor, or efl files. fsplit: . . . . . fsplit(1)
string, format of graphical files. /graphical primitive . . . . . gps(4)
link editor for common object files. ld: . . . . . ld(1)
and display m8.out object files. m8look: check . . . . . m8look(1)
listing of macro files. /cross-reference . . . . . macref(1)
network news article, utility files. news: USENET . . . . . news(5)

rm, rmdir: remove files or directories. . . . . rm(1)
/merge same lines of several files or subsequent lines of/ . . . . . paste(1)
unpack: compress and expand files. pack, pcat, . . . . . pack(1)
pr: print files. . . . . pr(1)
section sizes of common object files. size: print . . . . . size(1)
size: print sizes of object files. . . . . size.pdp(1)
sort: sort and/or merge files. . . . . sort(1)
each page. pager: prints files, stopping at the top of . . . . . pager(1)
USORS daily data and maintain files. summarize: summarize . . . . . summarize(5)
from archives. archive: send files to and retrieve files . . . . . archive.div(1)
JES3 network. usend: send files to another UNIX on the . . . . . usend(1C)
NSC network. nusend: send files to another UNIX on the . . . . . nusend(1C)
/convert object and archive files to common formats. . . . . convert(1)
trail: print trail of archived files. . . . . trail(1)
what: identify SCCS files. . . . . what(1)
APS-5 phototypesetter filter. daps, di10: Autologic . . . . . daps(1)
sp: filter for display terminals. . . . . sp(1)
terminals. pg: file perusal filter for soft-copy . . . . . pg(1)
greek: select terminal filter. . . . . greek(1)
nl: line numbering filter. . . . . nl(1)
npf: nroff print filter. . . . . npf(1)
col: filter reverse line-feeds. . . . . col(1)
printer (X9700). xopr: filter to print on Xerox 9700 . . . . . xopr(1)
tx: IBM tx train filter. . . . . tx(1)
graphical device routines and filters. /tekset, td: . . . . . gdev(1G)
tplot: graphics filters. . . . . tplot(1G)
acro: find acronyms in a text file. . . . . acro(1)
"to be". findbe: find all forms of the verb . . . . . findbe(1)
to inode numbers. findi: find file names corresponding . . . . . findi(1)
find: find files. . . . . find(1)
find: find files. . . . . find(1)
hyphen: find hyphenated words. . . . . hyphen(1)
ttyname, isatty: find name of a terminal. . . . . ttyname(3C)
object library. lorder: find ordering relation for an . . . . . b16lorder(1)
object library. lorder: find ordering relation for an . . . . . lorder(1)
hashmake, spellin, hashcheck: find spelling errors. spell, . . . . . spell(1)
spellwwb: find spelling errors. . . . . spellwwb(1)
word. spelltell: find the correct spelling of a . . . . . spelltell(1)
of the current user. ttyslot: find the slot in the utmp file . . . . . ttyslot(3C)
topic: find the topic of a document. . . . . topic(1)
verb "to be". findbe: find all forms of the . . . . . findbe(1)
double: double word finder. . . . . double(1)
corresponding to inode/ findi: find file names . . . . . findi(1)
about other users. finger: obtain information . . . . . finger(1)
fr: generate fiscal accounting reports. . . . . fr(1)
tee: pipe fitting. . . . . tee(1)
functions. fixit: CRT terminal editing . . . . . fixit(1)
fl: produce form letters. . . . . fl(1)
int, ifix, idint, real, float, sngl, dble, cmplx,/ . . . . . ftype(3F)
ecvt, fcvt, gcvt: convert floating-point number to/ . . . . . ecvt(3C)
/modf: manipulate parts of floating-point numbers. . . . . frexp(3C)
floor, ceiling, remainder,/ floor, ceil, fmod, fabs: . . . . . floor(3M)
floor, ceil, fmod, fabs: floor, ceiling, remainder,/ . . . . . floor(3M)
cflow: generate C flow graph. . . . . cflow(1)
fclose, fflush: close or flush a stream. . . . . fclose(3S)
remainder,/ floor, ceil, fmod, fabs: floor, ceiling, . . . . . floor(3M)
device-independent troff. font: description files for . . . . . font(5)
stream. fopen, freopen, fdopen: open a . . . . fopen(3S)

| | | |
|---|---|---|
| | fork: create a new process. | fork(2) |
| fl: produce | form letters. | fl(1) |
| per-process accounting file | format. acct: | acct(4) |
| entry. putgrent: | format and write a group file | putgrent(3X) |
| ar: common archive file | format. | ar(4) |
| from PDP-11 to common archive | format. /convert archive files | arcv.pdp(1) |
| ar: archive file | format. | ar.pdp(4) |
| a.out: Basic-16 object file | format. | b16a.out(4) |
| b16a.out file to hexadecimal | format. b16hx: Convert | b16hx(1) |
| errfile: error-log file | format. | errfile(4) |
| pnch: file | format for card images. | pnch(4) |
| formatting commands. | format: invoke embedded text | format(1) |
| object file to hex | format. /microcomputer | m4hx(1) |
| m4.out: BELLMAC-4 object file | format. | m4.out(4) |
| load module to hexadecimal | format. /microprocessor | m8hx(1) |
| microprocessor object file | format. m8.out: BELLMAC-8 | m8.out(4) |
| nroff or/ eqn, neqn, checkeq: | format mathematical text for | eqn(1) |
| description file. system: | format of 3B20S system | system(4) |
| newform: change the | format of a text file. | newform(1) |
| inode: | format of an i-node. | inode(4) |
| arch: | format of archive catalog. | arch(4) |
| term: | format of compiled term file. | term(4) |
| core: | format of core image file. | core(4) |
| cpio: | format of cpio archive. | cpio(4) |
| dir: | format of directories. | dir(4) |
| /graphical primitive string, | format of graphical files. | gps(4) |
| sccsfile: | format of SCCS file. | sccsfile(4) |
| file system: | format of system volume. | fs(4) |
| nroff, otroff: | format or typeset text. | nroff(1) |
| pwstat: | format password file entry. | pwstat(1) |
| files. fspec: | format specification in text | fspec(4) |
| object file symbol table | format. syms: common | syms(4) |
| troff. tbl: | format tables for nroff or | tbl(1) |
| sroff: | format text. | sroff(1) |
| and archive files to common | formats. /convert object | convert(1) |
| intro: introduction to file | formats. | intro(4) |
| wtmp: utmp and wtmp entry | formats. utmp, | utmp(4) |
| extr: extract file from | formatted input. | extr(1) |
| scanf, fscanf, sscanf: convert | formatted input. | scanf(3S) |
| /vfprintf, vsprintf: print | formatted output of a varargs/ | vprintf(3S) |
| fprintf, sprintf: print | formatted output. printf, | printf(3S) |
| /checkmm: print/check documents | formatted with the MM macros. | mm(1) |
| /BELLMAC-4 microcomputer hex | formatter for user PLA. | m4phx(1) |
| mptx: the macro package for | formatting a permuted index. | mptx(5) |
| troff: text | formatting and typesetting. | troff(1) |
| Descriptions. mwp: macros for | formatting Circuit | mwp(5) |
| format: invoke embedded text | formatting commands. | format(1) |
| mm: the MM macro package for | formatting documents. | mm(5) |
| OSDD adapter macro package for | formatting documents. /the | mosd(5) |
| manual. man: macros for | formatting entries in this | man(5) |
| findbe: find all | forms of the verb "to be". | findbe(1) |
| f77: | Fortran 77 compiler. | f77(1) |
| abs, iabs, dabs, cabs, zabs: | Fortran absolute value. | abs(3F) |
| system/ signal: specify | Fortran action on receipt of a | signal(3F) |
| function. acos, dacos: | Fortran arccosine intrinsic | acos(3F) |
| function. asin, dasin: | Fortran arcsine intrinsic | asin(3F) |
| function. atan2, datan2: | Fortran arctangent intrinsic | atan2(3F) |
| function. atan, datan: | Fortran arctangent intrinsic | atan(3F) |

or, xor, not, lshift, rshift: Fortran bitwise boolean/ and, . . . . . bool(3F)
getarg: return Fortran command-line argument. . . . getarg(3F)
log10, alog10, dlog10: Fortran common logarithm/ . . . . . log10(3F)
intrinsic/ conjg, dconjg: Fortran complex conjugate . . . . . conjg(3F)
function. cos, dcos, ccos: Fortran cosine intrinsic . . . . . cos(3F)
cratfor: rational Fortran dialect. . . . . cratfor(1)
ratfor: rational Fortran dialect. . . . . ratfor(1)
getenv: return Fortran environment variable. . . . . getenv(3F)
function. exp, dexp, cexp: Fortran exponential intrinsic . . . . . exp(3F)
intrinsic/ cosh, dcosh: Fortran hyperbolic cosine . . . . . cosh(3F)
intrinsic/ sinh, dsinh: Fortran hyperbolic sine . . . . . sinh(3F)
intrinsic/ tanh, dtanh: Fortran hyperbolic tangent . . . . . tanh(3F)
complex/ aimag, dimag: Fortran imaginary part of . . . . . aimag(3F)
function. aint, dint: Fortran integer part intrinsic . . . . . aint(3F)
efl: Extended Fortran Language. . . . . efl(1)
amax0, max1, amax1, dmax1: Fortran maximum-value/ /max0, . . . max(3F)
amin0, min1, amin1, dmin1: Fortran minimum-value/ /min0, . . . min(3F)
log, alog, dlog, clog: Fortran natural logarithm/ . . . . . log(3F)
anint, dnint, nint, idnint: Fortran nearest integer/ . . . . . round(3F)
abort: terminate Fortran program. . . . . abort(3F)
cstruct: structure Fortran programs. . . . . cstruct(1)
conformance to/ cverify: check Fortran programs for . . . . . cverify(1)
functions. mod, amod, dmod: Fortran remaindering intrinsic . . . . mod(3F)
function. sin, dsin, csin: Fortran sine intrinsic . . . . . sin(3F)
function. sqrt, dsqrt, csqrt: Fortran square root intrinsic . . . . . sqrt(3F)
len: return length of Fortran string. . . . . len(3F)
index: return location of Fortran substring. . . . . index(3F)
issue a shell command from Fortran. system: . . . . . system(3F)
function. tan, dtan: Fortran tangent intrinsic . . . . . tan(3F)
mclock: return Fortran time accounting. . . . . mclock(3F)
intrinsic/ sign, isign, dsign: Fortran transfer-of-sign . . . . . sign(3F)
/dcmplx, ichar, char: explicit Fortran type conversion. . . . . ftype(3F)
formatted output. printf, fprintf, sprintf: print . . . . . printf(3S)
word on a/ putc, putchar, fputc, putw: put character or . . . . . putc(3S)
stream. puts, fputs: put a string on a . . . . . puts(3S)
reports. fr: generate fiscal accounting . . . . . fr(1)
input/output. fread, fwrite: binary . . . . . fread(3S)
memory allocator. malloc, free, realloc, calloc: main . . . . . malloc(3C)
mallopt, mallinfo:/ malloc, free, realloc, calloc, . . . . . malloc(3X)
stream. fopen, freopen, fdopen: open a . . . . . fopen(3S)
parts of floating-point/ frexp, ldexp, modf: manipulate . . . . frexp(3C)
list: produce C source listing from 3B20S object file. . . . . list(1)
/and line number information from a common object file. . . . . strip(1)
getw: get character or word from a stream. /fgetc, . . . . . getc(3S)
gets, fgets: get a string from a stream. . . . . gets(3S)
rmdel: remove a delta from an SCCS file. . . . . rmdel(1)
files to and retrieve files from archives. archive: send . . . . . archive.div(1)
getopt: get option letter from argument vector. . . . . getopt(3C)
getdate: convert time and date from ASCII. . . . . getdate(3X)
to the/ apsend: send output from device-independent troff . . . . . apsend(1)
read: read from file. . . . . read(2)
extr: extract file from formatted input. . . . . extr(1)
system: issue a shell command from Fortran. . . . . system(3F)
ifetch: fetch data from IBM. . . . . ifetch(1)
nlist: get entries from name list. . . . . nlist(3C)
copyfile: copy a file from one place to another. . . . . copyfile(3X)
arcv: convert archive files from PDP-11 to common archive/ . . . arcv.pdp(1)
Reads m4we input data from tape. m4receive: . . . . . m4receive(1)

ttyin: input data from terminal. . . . . ttyin(1)
bibl: retrieve and list items from the BTL Bibliography. . . . . bibl(1)
nsctorje: re-route jobs from the NSC network to RJE. . . . . nsctorje(1C)
match: compare style tables from two or more texts. . . . . match(1)
getpw: get name from UID. . . . . getpw(3C)
ufetch: fetch data from Univac. . . . . ufetch(1)
formatted input. scanf, fscanf, sscanf: convert . . . . . scanf(3S)
of file systems processed by fsck. checklist: list . . . . . checklist(4)
reposition a file pointer in/ fseek, rewind, ftell: . . . . . fseek(3S)
fsend: send files. . . . . fsend(1C)
text files. fspec: format specification in . . . . . fspec(4)
efl files. fsplit: split f77, ratfor, or . . . . . fsplit(1)
stat, fstat: get file status. . . . . stat(2)
pointer in a/ fseek, rewind, ftell: reposition a file . . . . . fseek(3S)
communication package. ftok: standard interprocess . . . . . stdipc(3C)
ftp: file transfer program. . . . . ftp(1C)
ftw: walk a file tree. . . . . ftw(3C)
Fortran arccosine intrinsic function. acos, dacos: . . . . . acos(3F)
Fortran integer part intrinsic function. aint, dint: . . . . . aint(3F)
error/ erf, erfc: error function and complementary . . . . . erf(3M)
Fortran arcsine intrinsic function. asin, dasin: . . . . . asin(3F)
Fortran arctangent intrinsic function. atan2, datan2: . . . . . atan2(3F)
Fortran arctangent intrinsic function. atan, datan: . . . . . atan(3F)
complex conjugate intrinsic function. /dconjg: Fortran . . . . . conjg(3F)
ccos: Fortran cosine intrinsic function. cos, dcos, . . . . . cos(3F)
hyperbolic cosine intrinsic function. /dcosh: Fortran . . . . . cosh(3F)
precision product intrinsic function. dprod: double . . . . . dprod(3F)
and complementary error function. /error function . . . . . erf(3M)
Fortran exponential intrinsic function. exp, dexp, cexp: . . . . . exp(3F)
gamma: log gamma function. . . . . gamma(3M)
hypot: Euclidean distance function. . . . . hypot(3M)
common logarithm intrinsic function. /dlog10: Fortran . . . . . log10(3F)
natural logarithm intrinsic function. /dlog, clog: Fortran . . . . . log(3F)
matherr: error-handling function. . . . . matherr(3M)
prof: profile within a function. . . . . prof(5)
transfer-of-sign intrinsic function. /dsign: Fortran . . . . . sign(3F)
csin: Fortran sine intrinsic function. sin, dsin, . . . . . sin(3F)
hyperbolic sine intrinsic function. /dsinh: Fortran . . . . . sinh(3F)
Fortran square root intrinsic function. sqrt, dsqrt, csqrt: . . . . . sqrt(3F)
Fortran tangent intrinsic function. tan, dtan: . . . . . tan(3F)
hyperbolic tangent intrinsic function. /dtanh: Fortran . . . . . tanh(3F)
math: math functions and constants. . . . . math(5)
j0, j1, jn, y0, y1, yn: Bessel functions. . . . . bessel(3M)
Fortran bitwise boolean functions. /lshift, rshift: . . . . . bool(3F)
positive difference intrinsic functions. dim, ddim, idim: . . . . . dim(3F)
logarithm, power, square root functions. /sqrt: exponential, . . . . . exp(3M)
fixit: CRT terminal editing functions. . . . . fixit(1)
remainder, absolute value functions. /floor, ceiling, . . . . . floor(3M)
dmax1: Fortran maximum-value functions. /max1, amax1, . . . . . max(3F)
dmin1: Fortran minimum-value functions. /min1, amin1, . . . . . min(3F)
Fortran remaindering intrinsic functions. mod, amod, dmod: . . . . . mod(3F)
300, 300s: handle special functions of DASI 300 and 300s/ . . . 300(1)
hp: handle special functions of HP 2640 and/ . . . . . hp(1)
terminal. 450: handle special functions of the DASI 450 . . . . . 450(1)
printer. 9700: handle special functions of the XEROX 9700 . . . . 9700(1)
4000A: handle special functions of Trendata 4000A/ . . . . . 4000A(1)
Fortran nearest integer functions. /nint, idnint: . . . . . round(3F)
sinh, cosh, tanh: hyperbolic functions. . . . . sinh(3M)

string comparision intrinsic functions. /lgt, lle, llt: . . . . . strcmp(3F)
atan, atan2: trigonometric functions. /tan, asin, acos, . . . . . trig(3M)
Workbench system commands and functions. /table of Writer's . . . . . wwbinfo(1)
fread, fwrite: binary input/output. . . . . fread(3S)
jotto: secret word game. . . . . jotto(6)
moo: guessing game. . . . . moo(6)
back: the game of backgammon. . . . . back(6)
bj: the game of black jack. . . . . bj(6)
chess: the game of chess. . . . . chess(6)
craps: the game of craps. . . . . craps(6)
reversi: a game of dramatic reversals. . . . . reversi(6)
wump: the game of hunt-the-wumpus. . . . . wump(6)
intro: introduction to games. . . . . intro(6)
gamma: log gamma function. . . . . gamma(3M)
gamma: log gamma function. . . . . gamma(3M)
submit RJE jobs. send, gath: gather files and/or . . . . . send(1C)
jobs. send, gath: gather files and/or submit RJE . . . . send(1C)
number to string. ecvt, fcvt, gcvt: convert floating-point . . . . . ecvt(3C)
ged: graphical editor. . . . . ged(1G)
maze: generate a maze. . . . . maze(6)
abort: generate an IOT fault. . . . . abort(3C)
cflow: generate C flow graph. . . . . cflow(1)
cross-reference. cxref: generate C program . . . . . cxref(1)
crypt, setkey, encrypt: generate DES encryption. . . . . crypt(3C)
didoc: generate DI-3000 document. . . . . didoc(1)
makekey: generate encryption key. . . . . makekey(1)
terminal. ctermid: generate file name for . . . . . ctermid(3S)
reports. fr: generate fiscal accounting . . . . . fr(1)
imadoc: generate IMAGE document. . . . . imadoc(1G)
lexical tasks. lex: generate programs for simple . . . . . lex(1)
/srand48, seed48, lcong48: generate uniformly distributed/ . . . . drand48(3C)
microcomputer ROM and/ m4we: Generates BELLMAC-4 . . . . . m4we(1)
machine configuration file generator. /b16sts target . . . . . b16config(1)
insrg: ins route generator. . . . . insrg(1)
srand: simple random-number generator. rand, . . . . . rand(3C)
rand, srand: random number generator. irand, . . . . . rand(3F)
gets, fgets: get a string from a stream. . . . . gets(3S)
get: get a version of an SCCS file. . . . . get(1)
ulimit: get and set user limits. . . . . ulimit(2)
the user. cuserid: get character login name of . . . . . cuserid(3S)
getc, getchar, fgetc, getw: get character or word from a/ . . . . . getc(3S)
nlist: get entries from name list. . . . . nlist(3C)
umask: set and get file creation mask. . . . . umask(2)
stat, fstat: get file status. . . . . stat(2)
ustat: get file system statistics. . . . . ustat(2)
file. get: get a version of an SCCS . . . . . get(1)
/setgrent, endgrent, fgetgrent: get group file entry. . . . . getgrent(3C)
remote: get IBM remote number. . . . . remote(1)
logdir: get login directory. . . . . logdir(1)
getlogin: get login name. . . . . getlogin(3C)
logname: get login name. . . . . logname(1)
logtty: get login terminal name. . . . . logtty(1)
msgget: get message queue. . . . . msgget(2)
getpw: get name from UID. . . . . getpw(3C)
system. uname: get name of current UNIX . . . . . uname(2)
unget: undo a previous get of an SCCS file. . . . . unget(1)
argument vector. getopt: get option letter from . . . . . getopt(3C)
/setpwent, endpwent, fgetpwent: get password file entry. . . . . getpwent(3C)

working directory. getcwd: get path-name of current . . . . . getcwd(3C)
times. times: get process and child process . . . . . times(2)
and/ getpid, getpgrp, getppid: get process, process group, . . . . . getpid(2)
and/ /geteuid, getgid, getegid: get real and/or effective user . . . . . getuid(2)
semget: get set of semaphores. . . . . semget(2)
shmget: get shared memory segment. . . . . shmget(2)
current user. logname: get the login name of the . . . . . logdata(3X)
tty: get the name of the terminal. . . . . tty(1)
time: get time. . . . . time(2)
command-line argument. getarg: return Fortran . . . . . getarg(3F)
written file. getback: retrieve recently . . . . . getback(1)
get character or word from a/ getc, getchar, fgetc, getw: . . . . . getc(3S)
character or word from/ getc, getchar, fgetc, getw: get . . . . . getc(3S)
current working directory. getcwd: get path-name of . . . . . getcwd(3C)
from ASCII. getdate: convert time and date . . . . getdate(3X)
getuid, geteuid, getgid, getegid: get real and/or/ . . . . . getuid(2)
environment variable. getenv: return Fortran . . . . . getenv(3F)
environment name. getenv: return value for . . . . . getenv(3C)
real and/or effective/ getuid, geteuid, getgid, getegid: get . . . . . getuid(2)
and/or/ getuid, geteuid, getgid, getegid: get real . . . . . getuid(2)
setgrent, endgrent,/ getgrent, getgrgid, getgrnam, . . . . . getgrent(3C)
endgrent,/ getgrent, getgrgid, getgrnam, setgrent, . . . . . getgrent(3C)
getgrent, getgrgid, getgrnam, setgrent, endgrent,/ . . . . getgrent(3C)
getlogin: get login name. . . . . getlogin(3C)
argument vector. getopt: get option letter from . . . . . getopt(3C)
getopt: parse command options. . . . . getopt(1)
getpass: read a password. . . . . getpass(3C)
process group, and/ getpid, getpgrp, getppid: get process, . . . . . getpid(2)
process, process group, and/ getpid, getpgrp, getppid: get . . . . . getpid(2)
group, and/ getpid, getpgrp, getppid: get process, process . . . . . getpid(2)
getpw: get name from UID. . . . . getpw(3C)
comment field in password/ getpwcom, putpwcom: manipulate . . . getpwcom(3X)
password file entry. getpwcpy: make a copy of a . . . . . getpwcpy(3X)
setpwent, endpwent,/ getpwent, getpwuid, getpwnam, . . . . getpwent(3C)
getpwent, getpwuid, getpwnam, setpwent, endpwent,/ . . . getpwent(3C)
endpwent,/ getpwent, getpwuid, getpwnam, setpwent, . . . . getpwent(3C)
a stream. gets, fgets: get a string from . . . . . gets(3S)
and terminal settings used by getty. gettydefs: speed . . . . . gettydefs(4)
ct: spawn getty to a remote terminal. . . . . ct(1C)
settings used by getty. gettydefs: speed and terminal . . . . . gettydefs(4)
getegid: get real and/or/ getuid, geteuid, getgid, . . . . . getuid(2)
pututline, setutent,/ getutent, getutid, getutline, . . . . . getut(3C)
setutent, endutent,/ getutent, getutid, getutline, pututline, . . . . . getut(3C)
setutent,/ getutent, getutid, getutline, pututline, . . . . . getut(3C)
from a/ getc, getchar, fgetc, getw: get character or word . . . . . getc(3S)
convert/ ctime, localtime, gmtime, asctime, tzset: . . . . . ctime(3C)
setjmp, longjmp: non-local goto. . . . . setjmp(3C)
string, format of graphical/ gps: graphical primitive . . . . . gps(4)
cflow: generate C flow graph. . . . . cflow(1)
graph: draw a graph. . . . . graph(1G)
graph: draw a graph. . . . . graph(1G)
sag: system activity graph. . . . . sag(1G)
image: interactive graphic editor. . . . . image(1G)
commands. graphics: access graphical and numerical . . . . . graphics(1G)
/network useful with graphical commands. . . . . stat(1G)
/erase, hardcopy, tekset, td: graphical device routines and/ . . . . gdev(1G)
ged: graphical editor. . . . . ged(1G)
primitive string, format of graphical files. /graphical . . . . . gps(4)

format of graphical/ gps: graphical primitive string, . . . . . gps(4)
routines. toc: graphical table of contents . . . . . toc(1G)
gutil: graphical utilities. . . . . gutil(1G)
numerical commands. graphics: access graphical and . . . . graphics(1G)
tplot: graphics filters. . . . . tplot(1G)
TTY-37 type-box. greek: graphics for the extended . . . . . greek(5)
grx: DI-3000 graphics interface. . . . . grx(1)
plot: graphics interface. . . . . plot(4)
subroutines. plot: graphics interface . . . . . plot(3X)
imalt: Simple Graphics Language Translator. . . . . imalt(1G)
mfsend: batch DI-3000 graphics metafile interface. . . . . mfsend(1)
macro package for making view graphs. mview: another . . . . . mview(5)
extended TTY-37 type-box. greek: graphics for the . . . . . greek(5)
greek: select terminal filter. . . . . greek(1)
file for a pattern. grep, egrep, fgrep: search a . . . . . grep(1)
counseling. gripe: mail comments to UNIX . . . . gripe.ho(1)
administrator. gripe: send mail to system . . . . . gripe.mh(1)
and delete members to/from a group. addgrp,delgrp: add . . . . . addgrp(1)
/getppid: get process, process group, and parent process IDs. . . . . getpid(2)
chown, chgrp: change owner or group. . . . . chown(1)
endgrent, fgetgrent: get group file entry. /setgrent, . . . . . getgrent(3C)
putgrent: format and write a group file entry. . . . . putgrent(3X)
group: group file. . . . . group(4)
group: group file. . . . . group(4)
setpgrp: set process group ID. . . . . setpgrp(2)
id: print user and group IDs and names. . . . . id(1)
real and/or effective user and group IDs. /getegid: get . . . . . getuid(2)
setuid, setgid: set user and group IDs. . . . . setuid(2)
newgrp: log in to a new group. . . . . newgrp(1)
chown: change owner and group of a file. . . . . chown(2)
a signal to a process or a group of processes. /send . . . . . kill(2)
xchng: change owner and/or group. . . . . xchng(1)
update, and regenerate groups of programs. /maintain, . . . . make(1)
interface. grx: DI-3000 graphics . . . . . grx(1)
ssignal, gsignal: software signals. . . . . ssignal(3C)
hangman: guess the word. . . . . hangman(6)
moo: guessing game. . . . . moo(6)
gutil: graphical utilities. . . . . gutil(1G)
x25hlnk, x25dlnk: halt or detach a BX.25 link. . . . . x25hlnk(3C)
DASI 300 and 300s/ 300, 300s: handle special functions of . . . . . 300(1)
2640 and 2621-series/ hp: handle special functions of HP . . . . hp(1)
the DASI 450 terminal. 450: handle special functions of . . . . . 450(1)
the XEROX 9700 printer. 9700: handle special functions of . . . . . 9700(1)
Trendata 4000A/ 4000A: handle special functions of . . . . . 4000A(1)
varargs: handle variable argument list. . . . . varargs(5)
package. curses: CRT screen handling and optimization . . . . . curses(3X)
tabs: discussion of tab handling on UNIXTm. . . . . tabs(5)
hangman: guess the word. . . . . hangman(6)
nohup: run a command immune to hangups and quits. . . . . nohup(1)
graphical device/ hpd, erase, hardcopy, tekset, td: . . . . . gdev(1G)
hcreate, hdestroy: manage hash search tables. hsearch, . . . . . hsearch(3C)
spell, hashmake, spellin, hashcheck: find spelling/ . . . . . spell(1)
find spelling errors. spell, hashmake, spellin, hashcheck: . . . . . spell(1)
search tables. hsearch, hcreate, hdestroy: manage hash . . . . hsearch(3C)
tables. hsearch, hcreate, hdestroy: manage hash search . . . . . hsearch(3C)
file. scnhdr: section header for a Basic-16 object . . . . . scnhdr.div(4)
file. scnhdr: section header for a common object . . . . . scnhdr(4)
files. filehdr: file header for Basic-16 object . . . . . filehdr.div(4)

files. filehdr: file header for common object . . . . . filehdr(4)
file. ldfhread: read the file header of a common object . . . . . ldfhread(3X)
seek to the optional file header of a file. ldohseek: . . . . . ldohseek(3X)
read an indexed/named section header of a file. /ldnshread: . . . . . ldshread(3X)
archive/ ldahread: read the header of a member of an . . . . . ldahread(3X)
help: ask for help. . . . . help(1)
help: ask for help. . . . . help(1)
microcomputer object file to hex format. /Convert BELLMAC-4 . . m4hx(1)
m4phx: BELLMAC-4 microcomputer hex formatter for user PLA. . . . . m4phx(1)
data to hexadecimal. hex, unhex: convert/unconvert . . . . hex(1)
Convert b16a.out file to hexadecimal format. b16hx: . . . . . b16hx(1)
microprocessor load module to hexadecimal format. /BELLMAC-8 . . m8hx(1)
convert/unconvert data to hexadecimal. hex, unhex: . . . . . hex(1)
response/ overview: plots a historical overview of USORS . . . . . overview(1)
/compare response-time histories across systems. . . . . syscompare(1)
hpr: horizontal print. . . . . hpr(1)
handle special functions of HP 2640 and 2621-series/ hp: . . . . hp(1)
archiver. hpio: HP 2645A terminal tape file . . . . . hpio(1)
of HP 2640 and 2621-series/ hp: handle special functions . . . . . hp(1)
td: graphical device routines/ hpd, erase, hardcopy, tekset, . . . . . gdev(1G)
file archiver. hpio: HP 2645A terminal tape . . . . hpio(1)
hpr: horizontal print. . . . . hpr(1)
manage hash search tables. hsearch, hcreate, hdestroy: . . . . . hsearch(3C)
wump: the game of hunt-the-wumpus. . . . . wump(6)
cosh, dcosh: Fortran hyperbolic cosine intrinsic/ . . . . . cosh(3F)
sinh, cosh, tanh: hyperbolic functions. . . . . sinh(3M)
sinh, dsinh: Fortran hyperbolic sine intrinsic/ . . . . . sinh(3F)
tanh, dtanh: Fortran hyperbolic tangent intrinsic/ . . . . . tanh(3F)
hyphen: find hyphenated words. . . . . hyphen(1)
hyphen: find hyphenated words. . . . . hyphen(1)
function. hypot: Euclidean distance . . . . . hypot(3M)
Fortran absolute value. abs, iabs, dabs, cabs, zabs: . . . . . abs(3F)
iargc: iargc. . . . . iargc(3F)
iargc: iargc. . . . . iargc(3F)
ifetch: fetch data from IBM. . . . . ifetch(1)
remote: get IBM remote number. . . . . remote(1)
tx: IBM tx train filter. . . . . tx(1)
/sngl, dble, cmplx, dcmplx, ichar, char: explicit Fortran/ . . . . . ftype(3F)
semaphore set or shared memory id. /remove a message queue, . . . . . ipcrm(1)
and names. id: print user and group IDs . . . . . id(1)
setpgrp: set process group ID. . . . . setpgrp(2)
issue: issue identification file. . . . . issue(4)
what: identify SCCS files. . . . . what(1)
intrinsic/ dim, ddim, idim: positive difference . . . . . dim(3F)
dble, cmplx,/ int, ifix, idint, real, float, sngl, . . . . . ftype(3F)
integer/ anint, dnint, nint, idnint: Fortran nearest . . . . . round(3F)
id: print user and group IDs and names. . . . . id(1)
group, and parent process IDs. /get process, process . . . . . getpid(2)
effective user and group IDs. /getegid: get real and/or . . . . . getuid(2)
setgid: set user and group IDs. setuid, . . . . . setuid(2)
ifetch: fetch data from IBM. . . . . ifetch(1)
sngl, dble, cmplx,/ int, ifix, idint, real, float, . . . . . ftype(3F)
account: produces the IHCC Accounting Report for/ . . . . account(1C)
Converter. imacv: IMAGE Data Base . . . . . imacv(1G)
document. imadoc: generate IMAGE . . . . . imadoc(1G)
imacv: IMAGE Data Base Converter. . . . imacv(1G)
imadoc: generate IMAGE document. . . . . imadoc(1G)
core: format of core image file. . . . . core(4)

editor. image: interactive graphic . . . . . image(1G)
imale: IMAGE Library Editor. . . . . imale(1G)
pnch: file format for card images. . . . . pnch(4)
aimag, dimag: Fortran imaginary part of complex/ . . . . . aimag(3F)
imale: IMAGE Library Editor. . . . imale(1G)
Language Translator. imalt: Simple Graphics . . . . . imalt(1G)
nohup: run a command immune to hangups and quits. . . . nohup(1)
asilib: assembly language include macros. . . . . asilib(4)
b16pause: indefinite wait. . . . . b16pause(1)
for formatting a permuted index. /the macro package . . . . . mptx(5)
of a/ ldtbindex: compute the index of a symbol table entry . . . . . ldtbindex(3X)
ptx: permuted index. . . . . ptx(1)
Fortran substring. index: return location of . . . . . index(3F)
a file. ldtbread: read an indexed symbol table entry of . . . . . ldtbread(3X)
ldshread, ldnshread: read an indexed/named section header/ . . . . ldshread(3X)
ldsseek, ldnsseek: seek to an indexed/named section of a/ . . . . . ldsseek(3X)
inews: submit news articles. . . . . inews(1)
print information about split infinitives. splitrules: . . . . . splitrules(1)
local systems. info: obtain information about . . . . . info(1)
inittab: script for the init process. . . . . inittab(4)
process. popen, pclose: initiate pipe to/from a . . . . . popen(3S)
process. inittab: script for the init . . . . . inittab(4)
inode: format of an i-node. . . . . inode(4)
inode: format of an i-node. . . . . inode(4)
file names corresponding to inode numbers. findi: find . . . . . findi(1)
m4receive: Reads m4we input data from tape. . . . . m4receive(1)
ttyin: input data from terminal. . . . . ttyin(1)
m4send: Writes m4we input data to tape. . . . . m4send(1)
extract file from formatted input. extr: . . . . . extr(1)
bsplit: splits standard input into n-block pieces. . . . . bsplit(1)
sscanf: convert formatted input. scanf, fscanf, . . . . . scanf(3S)
push character back into input stream. ungetc: . . . . . ungetc(3S)
fread, fwrite: binary input/output. . . . . fread(3S)
stdio: standard buffered input/output package. . . . . stdio(3S)
fileno: stream status inquiries. /feof, clearerr, . . . . . ferror(3S)
uustat: uucp status inquiry and job control. . . . . uustat(1C)
communication. ins: inter-system . . . . . ins(1)
insrg: ins route generator. . . . . insrg(1)
insrg: ins route generator. . . . . insrg(1)
x25alnk, x25ilnk: attach or install a BX.25 link. . . . . x25alnk(3C)
link. x25ipvc, x25rpvc: install or remove a PVC on a . . . . . x25ipvc(3C)
sngl, dble, cmplx, dcmplx,/ int, ifix, idint, real, float, . . . . . ftype(3F)
abs: return integer absolute value. . . . . abs(3C)
/l64a: convert between long integer and base-64 ASCII/ . . . . . a64l(3C)
sputl, sgetl: access long integer data in a/ . . . . . sputl(3X)
nint, idnint: Fortran nearest integer functions. /dnint, . . . . . round(3F)
function. aint, dint: Fortran integer part intrinsic . . . . . aint(3F)
atol, atoi: convert string to integer. strtol, . . . . . strtol(3C)
/ltol3: convert between 3-byte integers and long integers. . . . . l3tol(3C)
3-byte integers and long integers. /convert between . . . . . l3tol(3C)
image: interactive graphic editor. . . . . image(1G)
system. mailx: interactive message processing . . . . mailx(1)
rjestat: RJE status report and interactive status console. . . . . rjestat(1C)
grx: DI-3000 graphics interface. . . . . grx(1)
DI-3000 graphics metafile interface. mfsend: batch . . . . . mfsend(1)
DI-3000 Metafile Translator interface. mfx: . . . . . mfx(1)
plot: graphics interface. . . . . plot(4)
plot: graphics interface subroutines. . . . . plot(3X)

arch: interface to system archive. . . . . arch(1)
of the communications interface USART. /registers . . . . . un53ctl(1C)
spline: interpolate smooth curve. . . . . spline(1G)
characters. asa: interpret ASA carriage control . . . . asa(1)
sno: SNOBOL interpreter. . . . . sno(1)
tc, otc: troff output interpreter. . . . . tc(1)
pipe: create an interprocess channel. . . . . pipe(2)
facilities/ ipcs: report inter-process communication . . . . . ipcs(1)
package. ftok: standard interprocess communication . . . . . stdipc(3C)
ins: inter-system communication. . . . . ins(1)
suspend execution for an interval. sleep: . . . . . sleep(1)
sleep: suspend execution for interval. . . . . sleep(3C)
acos, dacos: Fortran arccosine intrinsic function. . . . . acos(3F)
dint: Fortran integer part intrinsic function. aint, . . . . . aint(3F)
asin, dasin: Fortran arcsine intrinsic function. . . . . asin(3F)
datan2: Fortran arctangent intrinsic function. atan2, . . . . . atan2(3F)
datan: Fortran arctangent intrinsic function. atan, . . . . . atan(3F)
Fortran complex conjugate intrinsic function. /dconjg: . . . . . conjg(3F)
dcos, ccos: Fortran cosine intrinsic function. cos, . . . . . cos(3F)
Fortran hyperbolic cosine intrinsic function. /dcosh: . . . . . cosh(3F)
double precision product intrinsic function. dprod: . . . . . dprod(3F)
cexp: Fortran exponential intrinsic function. /dexp, . . . . . exp(3F)
Fortran common logarithm intrinsic function. /dlog10: . . . . . log10(3F)
Fortran natural logarithm intrinsic function. /clog: . . . . . log(3F)
Fortran transfer-of-sign intrinsic function. /dsign: . . . . . sign(3F)
sin, dsin, csin: Fortran sine intrinsic function. . . . . sin(3F)
dsinh: Fortran hyperbolic sine intrinsic function. sinh, . . . . . sinh(3F)
csqrt: Fortran square root intrinsic function. /dsqrt, . . . . . sqrt(3F)
tan, dtan: Fortran tangent intrinsic function. . . . . tan(3F)
Fortran hyperbolic tangent intrinsic function. /dtanh: . . . . . tanh(3F)
idim: positive difference intrinsic functions. /ddim, . . . . . dim(3F)
dmod: Fortran remaindering intrinsic functions. /amod, . . . . . mod(3F)
lle, llt: string comparision intrinsic functions. /lgt, . . . . . strcmp(3F)
commands and application/ intro: introduction to . . . . . intro(1)
formats. intro: introduction to file . . . . . intro(4)
intro: introduction to games. . . . . intro(6)
miscellany. intro: introduction to . . . . . intro(5)
subroutines and libraries. intro: introduction to . . . . . intro(3)
calls and error numbers. intro: introduction to system . . . . . intro(2)
application programs. intro: introduction to commands and . . . . intro(1)
intro: introduction to file formats. . . . . intro(4)
intro: introduction to games. . . . . intro(6)
intro: introduction to miscellany. . . . . intro(5)
and libraries. intro: introduction to subroutines . . . . . intro(3)
and error numbers. intro: introduction to system calls . . . . . intro(2)
formatting commands. format: invoke embedded text . . . . . format(1)
ioctl: control device. . . . . ioctl(2)
abort: generate an IOT fault. . . . . abort(3C)
semaphore set or shared/ ipcrm: remove a message queue, . . . . ipcrm(1)
communication facilities/ ipcs: report inter-process . . . . . ipcs(1)
number generator. irand, rand, srand: random . . . . . rand(3F)
cprs: compress an IS25 object file. . . . . b16cprs(1)
cprs: compress an IS25 object file. . . . . cprs(1)
/islower, isdigit, isxdigit, isalnum, isspace, ispunct,/ . . . . . ctype(3C)
isdigit, isxdigit, isalnum,/ isalpha, isupper, islower, . . . . . ctype(3C)
/isprint, isgraph, iscntrl, isascii: classify characters. . . . . ctype(3C)
terminal. ttyname, isatty: find name of a . . . . . ttyname(3C)
/ispunct, isprint, isgraph, iscntrl, isascii: classify/ . . . . . ctype(3C)

isalpha, isupper, islower, isdigit, isxdigit, isalnum,/ . . . . . ctype(3C)
/isspace, ispunct, isprint, isgraph, iscntrl, isascii:/ . . . . . ctype(3C)
transfer-of-sign/ sign, isign, dsign: Fortran . . . . . sign(3F)
isalnum,/ isalpha, isupper, islower, isdigit, isxdigit, . . . . . ctype(3C)
/isalnum, isspace, ispunct, isprint, isgraph, iscntrl,/ . . . . . ctype(3C)
/isxdigit, isalnum, isspace, ispunct, isprint, isgraph,/ . . . . . ctype(3C)
/isdigit, isxdigit, isalnum, isspace, ispunct, isprint,/ . . . . . ctype(3C)
Fortran. system: issue a shell command from . . . . . system(3F)
system: issue a shell command. . . . . system(3S)
issue: issue identification file. . . . . issue(4)
file. issue: issue identification . . . . . issue(4)
isxdigit, isalnum,/ isalpha, isupper, islower, isdigit, . . . . . ctype(3C)
/isupper, islower, isdigit, isxdigit, isalnum, isspace,/ . . . . . ctype(3C)
Send document requests to ITDS. itds: . . . . . itds(1)
to ITDS. itds: Send document requests . . . . . itds(1)
bibl: retrieve and list items from the BTL/ . . . . . bibl(1)
news: print news items. . . . . news(1)
functions. j0, j1, jn, y0, y1, yn: Bessel . . . . . bessel(3M)
functions. j0, j1, jn, y0, y1, yn: Bessel . . . . . bessel(3M)
bj: the game of black jack. . . . . bj(6)
files to another UNIX on the JES3 network. usend: send . . . . . usend(1C)
functions. j0, j1, jn, y0, y1, yn: Bessel . . . . . bessel(3M)
operator. join: relational database . . . . . join(1)
jotto: secret word game. . . . . jotto(6)
/lrand48, nrand48, mrand48, jrand48, srand48, seed48,/ . . . . . drand48(3C)
assembler/un-assembler for/ kasb, kunb: . . . . . kasb(1)
sar: seek and read data in kernel memory. . . . . sar(3X)
makekey: generate encryption key. . . . . makekey(1)
process or a group of/ kill: send a signal to a . . . . . kill(2)
kill: terminate a process. . . . . kill(1)
/assembler/un-assembler for the KMC11B microprocessor. . . . . kasb(1)
quiz: test your knowledge. . . . . quiz(6)
for the KMC11B/ kasb, kunb: assembler/un-assembler . . . . kasb(1)
3-byte integers and long/ l3tol, ltol3: convert between . . . . . l3tol(3C)
integer and base-64/ a64l, l64a: convert between long . . . . . a64l(3C)
scanning and processing language. awk: pattern . . . . . awk(1)
arbitrary-precision arithmetic language. bc: . . . . . bc(1)
efl: Extended Fortran Language. . . . . efl(1)
asilib: assembly language include macros. . . . . asilib(4)
cpp: the C language preprocessor. . . . . cpp(1)
command programming language. /standard/restricted . . . . sh(1)
imalt: Simple Graphics Language Translator. . . . . imalt(1G)
troff: description of output language. . . . . troff(5)
usl: uniform job submittal language. . . . . usl(1)
shl: shell layer manager. . . . . shl(1)
/jrand48, srand48, seed48, lcong48: generate uniformly/ . . . . . drand48(3C)
ld: link editor for Basic-16. . . . . b16ld(1)
object files. ld: link editor for common . . . . . ld(1)
ld: link editor. . . . . ld.pdp(1)
object file. ldclose, ldaclose: close a common . . . . . ldclose(3X)
member of an archive file. ldahread: read the header of a . . . . ldahread(3X)
file for reading. ldopen, ldaopen: open a common object . . . . ldopen(3X)
common object file. ldclose, ldaclose: close a . . . . . ldclose(3X)
of floating-point/ frexp, ldexp, modf: manipulate parts . . . . . frexp(3C)
access routines. ldfcn: common object file . . . . . ldfcn(4)
of a common object file. ldfhread: read the file header . . . . . ldfhread(3X)
name for common object file. ldgetname: retrieve symbol . . . . . ldgetname(3X)
line number entries/ ldlread, ldlinit, ldlitem: manipulate . . . . . ldlread(3X)

number/ ldlread, ldlinit, ldlitem: manipulate line . . . . . ldlread(3X)
manipulate line number/ ldlread, ldlinit, ldlitem: . . . . . ldlread(3X)
line number of a common/ ldlseek, ldnlseek: seek to . . . . . ldlseek(3X)
of a common object/ ldlseek, ldnlseek: seek to line number . . . . . ldlseek(3X)
entries of a section/ ldrseek, ldnrseek: seek to relocation . . . . . ldrseek(3X)
indexed/named/ ldshread, ldnshread: read an . . . . . ldshread(3X)
indexed/named/ ldsseek, ldnsseek: seek to an . . . . . ldsseek(3X)
file header of a file. ldohseek: seek to the optional . . . . . ldohseek(3X)
object file for reading. ldopen, ldaopen: open a common . . . ldopen(3X)
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manprog: print entries in this manual. man, . . . . . man(1)
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msgctl: message control operations. . . . . msgctl(2)
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dminl: Fortran/ min, min0, amin0, min1, amin1, . . . . . min(3F)
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cp, ln, mv: copy, link or move files. . . . . cp(1)
pmvt: typeset viewgraph with MV macros and ptroff. . . . . pmvt(1)
for making view graphs. mview: another macro package . . . . mview(5)
viewgraphs, and slides. mmt, mvt: typeset documents, . . . . . mmt(1)

Circuit Descriptions. mwp: macros for formatting . . . . . mwp(5)
log, alog, dlog, clog: Fortran natural logarithm intrinsic/ . . . . . log(3F)
splits standard input into n-block pieces. bsplit: . . . . . bsplit(1)
/dnint, nint, idnint: Fortran nearest integer functions. . . . . round(3F)
mathematical text for/ eqn, neqn, checkeq: format . . . . . eqn(1)
definitions for eqn and neqn. /special character . . . . . eqnchar(5)
PCL network. net: execute a command on the . . . . net(1C)
execute a command on the PCL network. net: . . . . . net(1C)
files. news: USENET network news article, utility . . . . . news(5)
operation status of the NSC network. nscstat: query the . . . . . nscstat(1C)
to another UNIX on the NSC network. nusend: send files . . . . . nusend(1C)
re-route jobs from the NSC network to RJE. nsctorje: . . . . . nsctorje(1C)
commands. stat: statistical network useful with graphical . . . . . stat(1G)
to another UNIX on the JES3 network. usend: send files . . . . . usend(1C)
a text file. newform: change the format of . . . . newform(1)
newgrp: log in to a new group. . . . . newgrp(1)
news: USENET network news article, utility files. . . . . news(5)
inews: submit news articles. . . . . inews(1)
postnews: submit news articles. . . . . postnews(1)
readnews: read news articles. . . . . readnews(1)
uurec: receive processed news articles via mail. . . . . uurec(1)
check to see if user has news. checknews: . . . . . checknews(1)
news: print news items. . . . . news(1)
news: print news items. . . . . news(1)
article, utility files. news: USENET network news . . . . news(5)
readnews and checknews. newsrc: information file for . . . . . newsrc(5)
process. nice: change priority of a . . . . . nice(2)
priority. nice: run a command at low . . . . . nice(1)
integer/ anint, dnint, nint, idnint: Fortran nearest . . . . . round(3F)
nl: line numbering filter. . . . . nl(1)
list. nlist: get entries from name . . . . . nlist(3C)
nm: Basic-16 name list. . . . . b16nm(1)
nm: print name list. . . . . nm.pdp(1)
object file. nm: print name list of common . . . . nm(1)
hangups and quits. nohup: run a command immune to . . . nohup(1)
setjmp, longjmp: non-local goto. . . . . setjmp(3C)
bitwise boolean/ and, or, xor, not, lshift, rshift: Fortran . . . . . bool(3F)
npf: nroff print filter. . . . . npf(1)
drand48, erand48, lrand48, nrand48, mrand48, jrand48,/ . . . . . drand48(3C)
broff: batching of nroff and troff. . . . . broff(1)
9700 printer. x9700: prepare nroff documents for the Xerox . . . . x9700(1)
format mathematical text for nroff or troff. /checkeq: . . . . . eqn(1)
tbl: format tables for nroff or troff. . . . . tbl(1)
typeset text. nroff, otroff: format or . . . . . nroff(1)
npf: nroff print filter. . . . . npf(1)
pseudo-ats document for nroff/MM. ats: transform . . . . . ats(1)
mmlint: sroff/MM nroff/MM document/ . . . . . mmlint(1)
constructs. deroff: remove nroff/troff, tbl, and eqn . . . . . deroff(1)
the operation status of the NSC network. nscstat: query . . . . . nscstat(1C)
files to another UNIX on the NSC network. nusend: send . . . . . nusend(1C)
re-route jobs from the NSC network to RJE. nsctorje: . . . . nsctorje(1C)
status of the NSC network. nscstat: query the operation . . . . . nscstat(1C)
the NSC network to RJE. nsctorje: re-route jobs from . . . . . nsctorje(1C)
nl: line numbering filter. . . . . nl(1)
graphics: access graphical and numerical commands. . . . . graphics(1G)
UNIX on the NSC network. nusend: send files to another . . . . . nusend(1C)
common/ convert: convert object and archive files to . . . . . convert(1)
ldfcn: common object file access routines. . . . . ldfcn(4)

check the contents of a object file. ckfile: . . . . . b16ckfile(1)
cprs: compress an IS25 object file. . . . . b16cprs(1)
dumps selected parts of an object file. dump: . . . . . b16dump(1)
conv: Basic-16 SGS Object File Converter. . . . . b16conv(1)
cprs: compress an IS25 object file. . . . . cprs(1)
dump selected parts of an object file. dump: . . . . . dump(1)
ldopen, ldaopen: open a common object file for reading. . . . . ldopen(3X)
a.out: Basic-16 object file format. . . . . b16a.out(4)
m4.out: BELLMAC-4 object file format. . . . . m4.out(4)
BELLMAC-8 microprocessor object file format. m8.out: . . . . . m8.out(4)
ldaclose: close a common object file. ldclose, . . . . . ldclose(3X)
the file header of a common object file. ldfhread: read . . . . . ldfhread(3X)
symbol name for common object file. /retrieve . . . . . ldgetname(3X)
line number entries of an object file. /manipulate . . . . . ldlread(3X)
to line number of a common object file. /ldnlseek: seek . . . . . ldlseek(3X)
the symbol table of a common object file. /seek to . . . . . ldtbseek(3X)
number entries in a common object file. linenum: line . . . . . linenum(4)
C source listing from 3B20S object file. list: produce . . . . . list(1)
m8size: size of an object file. . . . . m8size(1)
nm: print name list of common object file. . . . . nm(1)
information for a common object file. /relocation . . . . . reloc(4)
information for a Basic-16 object file. /relocation . . . . . reloc.div(4)
section header for a common object file. scnhdr: . . . . . scnhdr(4)
section header for a Basic-16 object file. scnhdr: . . . . . scnhdr.div(4)
information from a common object file. /and line number . . . . . strip(1)
format. syms: common object file symbol table . . . . . syms(4)
/BELLMAC-4 microcomputer object file to hex format. . . . . m4hx(1)
file header for common object files. filehdr: . . . . . filehdr(4)
file header for Basic-16 object files. filehdr: . . . . . filehdr.div(4)
ld: link editor for common object files. . . . . ld(1)
check and display m8.out object files. m8look: . . . . . m8look(1)
print section sizes of common object files. size: . . . . . size(1)
size: print sizes of object files. . . . . size.pdp(1)
find ordering relation for an object library. lorder: . . . . . b16lorder(1)
find ordering relation for an object library. lorder: . . . . . lorder(1)
sky: obtain ephemerides. . . . . sky(6)
systems. info: obtain information about local . . . . info(1)
users. finger: obtain information about other . . . . finger(1)
od: octal dump. . . . . od(1)
constant-width text for/ ocw, checkcw: prepare . . . . . ocw(1)
od: octal dump. . . . . od(1)
ucat: off-line print on UNIVAC. . . . . ucat(1)
opr: offline print. . . . . opr.py(1C)
xopr: offline print. . . . . xopr.py(1)
Basic-16. man: Print on-line documentation for . . . . . b16man(1)
Writer's Workbench/ wwbaid: On-line user's aid for the . . . . . wwbaid(1)
reading. ldopen, ldaopen: open a common object file for . . . . . ldopen(3X)
fopen, freopen, fdopen: open a stream. . . . . fopen(3S)
dup: duplicate an open file descriptor. . . . . dup(2)
open: open for reading or writing. . . . . open(2)
writing. open: open for reading or . . . . . open(2)
network. nscstat: query the operation status of the NSC . . . . . nscstat(1C)
/(shared memory) operations. . . . . maus(2)
memcmp, memcpy, memset: memory operations. memccpy, memchr, . . . . memory(3C)
msgctl: message control operations. . . . . msgctl(2)
msgop: message operations. . . . . msgop(2)
semctl: semaphore control operations. . . . . semctl(2)
semop: semaphore operations. . . . . semop(2)

shmctl: shared memory control operations. . . . . shmctl(2)
shmop: shared memory operations. . . . . shmop(2)
strcspn, strtok: string operations. /strpbrk, strspn, . . . . . string(3C)
join: relational database operator. . . . . join(1)
opr: offline print. . . . . opr.py(1C)
CRT screen handling and optimization package. curses: . . . . . curses(3X)
vector. getopt: get option letter from argument . . . . . getopt(3C)
file. ldohseek: seek to the optional file header of a . . . . . ldohseek(3X)
fcntl: file control options. . . . . fcntl(5)
stty: set the options for a terminal. . . . . stty(1)
getopt: parse command options. . . . . getopt(1)
Fortran bitwise boolean/ and, or, xor, not, lshift, rshift: . . . . . bool(3F)
object library. lorder: find ordering relation for an . . . . . b16lorder(1)
object library. lorder: find ordering relation for an . . . . . lorder(1)
a directory, or a special or ordinary file. mknod: make . . . . . mknod(2)
a document. org: show the organization of . . . . . org(1)
org: show the organization of a document. . . . . org(1)
formatting/ mosd: the OSDD adapter macro package for . . . mosd(5)
documents formatted with/ mm, osdd, checkmm: print/check . . . . . mm(1)
tc, otc: troff output interpreter. . . . . tc(1)
text. nroff, otroff: format or typeset . . . . . nroff(1)
constant-width text for otroff. ocw, checkcw: prepare . . . . . ocw(1)
dial: establish an out-going terminal line/ . . . . . dial(3C)
assembler and link editor output. a.out: common . . . . . a.out(4)
assembler and link editor output. a.out: PDP-11 . . . . . a.out.pdp(4)
troff to the/ apsend: send output from device-independent . . . . apsend(1)
tc, otc: troff output interpreter. . . . . tc(1)
troff: description of output language. . . . . troff(5)
/vsprintf: print formatted output of a varargs argument/ . . . . vprintf(3S)
sprintf: print formatted output. printf, fprintf, . . . . . printf(3S)
plotter. stare: send troff output to a local STARE . . . . . stare.mh(1C)
prism: send troff output to local prism device. . . . . prism(1C)
stare: send troff output to local STARE plotter. . . . . stare(1C)
photo: send troff output to MH typesetter. . . . . photo(1C)
BELLMAC-8/ m8ol: overlay link editor for . . . . . m8ol(1)
overview: plots a historical overview of USORS response/ . . . . overview(1)
overview of USORS response/ overview: plots a historical . . . . . overview(1)
chown: change owner and group of a file. . . . . chown(2)
xchng: change owner and/or group. . . . . xchng(1)
chown, chgrp: change owner or group. . . . . chown(1)
compiler. p8cc: portable BELLMAC-8 C . . . . p8cc(1)
dis-assembler and line lister/ p8list: BELLMAC-8 . . . . . p8list(1)
and expand files. pack, pcat, unpack: compress . . . . . pack(1)
handling and optimization package. curses: CRT screen . . . . . curses(3X)
permuted/ mptx: the macro package for formatting a . . . . . mptx(5)
documents. mm: the MM macro package for formatting . . . . . mm(5)
mosd: the OSDD adapter macro package for formatting/ . . . . . mosd(5)
graphs. mview: another macro package for making view . . . . . mview(5)
viewgraphs/ mv: a troff macro package for typesetting . . . . . mv(5)
standard buffered input/output package. stdio: . . . . . stdio(3S)
interprocess communication package. ftok: standard . . . . . stdipc(3C)
stopping at the top of each page. pager: prints files, . . . . . pager(1)
pgr: pager for crt terminals. . . . . pgr(1)
at the top of each page. pager: prints files, stopping . . . . . pager(1)
binary, source and/or manual pages. whereis: locate . . . . . whereis(1)
4014 terminal. 4014: paginator for the Tektronix . . . . . 4014(1)
document to UNIX. parch: transfer ATS archive . . . . . parch(1C)
process, process group, and parent process IDs. /get . . . . . getpid(2)

getopt: parse command options. . . . . getopt(1)
passwd: change login password. . . . passwd(1)
passwd: change login password. . . . passwd.div(1)
passwd: password file. . . . . passwd(4)
/manipulate comment field in password file entries. . . . . getpwcom(3X)
specified/ whois: returns password file entry for . . . . . whois(1)
getpwcpy: make a copy of a password file entry. . . . . getpwcpy(3X)
/endpwent, fgetpwent: get password file entry. . . . . getpwent(3C)
putpwent: write password file entry. . . . . putpwent(3C)
pwstat: format password file entry. . . . . pwstat(1)
passwd: password file. . . . . passwd(4)
getpass: read a password. . . . . getpass(3C)
passwd: change login password. . . . . passwd(1)
passwd: change login password. . . . . passwd.div(1)
several files or subsequent/ paste: merge same lines of . . . . . paste(1)
dirname: deliver portions of path names. basename, . . . . . basename(1)
paths: directory path names for Basic-16. . . . . paths(4)
directory. getcwd: get path-name of current working . . . . . getcwd(3C)
for Basic-16. paths: directory path names . . . . . paths(4)
fgrep: search a file for a pattern. grep, egrep, . . . . . grep(1)
processing language. awk: pattern scanning and . . . . . awk(1)
signal. pause: suspend process until . . . . . pause(2)
expand files. pack, pcat, unpack: compress and . . . . . pack(1)
cc, pcc: C compiler. . . . . cc(1)
net: execute a command on the PCL network. . . . . net(1C)
a process. popen, pclose: initiate pipe to/from . . . . . popen(3S)
as: assembler for PDP-11. . . . . as.pdp(1)
editor output. a.out: PDP-11 assembler and link . . . . . a.out.pdp(4)
/convert archive files from PDP-11 to common archive/ . . . . . arcv.pdp(1)
truth value about your/ pdp11, u3b, u3b5, vax: provide . . . . machid(1)
plot USORS daily response time percentiles. dayplot: . . . . . dayplot(1)
mesg: permit or deny messages. . . . . mesg(1)
macro package for formatting a permuted index. mptx: the . . . . . mptx(5)
ptx: permuted index. . . . . ptx(1)
format. acct: per-process accounting file . . . . . acct(4)
sys_nerr: system error/ perror, errno, sys_errlist, . . . . . perror(3C)
terminals. pg: file perusal filter for soft-copy . . . . . pg(1)
programs for conformance to PFORT. cverify: check Fortran . . . . cverify(1)
soft-copy terminals. pg: file perusal filter for . . . . . pg(1)
pgr: pager for crt terminals. . . . . pgr(1)
mass: execute assembly phase of MICA. . . . . mass(1)
mdef: execute definition phase of MICA. . . . . mdef(1)
mlst: execute listing phase of MICA. . . . . mlst(1)
typesetter. photo: send troff output to MH . . . . photo(1C)
/troff to the MHCC phototypesetter. . . . . apsend(1)
daps, di10: Autologic APS-5 phototypesetter filter. . . . . daps(1)
request status of APS-5 phototypesetter jobs/ apstat: . . . . . apstat(1)
spellwwb, or/ dictadd: add phrases to user's diction, . . . . . dictadd(1)
submitted typesetter jobs. phstat: request status of . . . . . phstat(1C)
pib: print specified UNIX PIB. . . . . pib(1)
pib: print specified UNIX PIB. . . . pib(1)
drawing simple pictures. pic: troff preprocessor for . . . . . pic(1)
for drawing simple pictures. /troff preprocessor . . . . . pic(1)
standard input into n-block pieces. bsplit: splits . . . . . bsplit(1)
split: split a file into pieces. . . . . split(1)
channel. pipe: create an interprocess . . . . . pipe(2)
tee: pipe fitting. . . . . tee(1)
popen, pclose: initiate pipe to/from a process. . . . . popen(3S)

boolean description of user — PLA. /BELLMAC-4 microcomputer . . . m4pb(1)
hex formatter for user — PLA. /BELLMAC-4 microcomputer . . . m4phx(1)
microcomputer ROM and — PLA XY mask. /BELLMAC-4 . . . . m4we(1)
data in memory. — plock: lock process, text, or . . . . . plock(2)
— plot: graphics interface. . . . . plot(4)
subroutines. — plot: graphics interface . . . . . plot(3X)
percentiles. dayplot: — plot USORS daily response time . . . dayplot(1)
USORS response time/ overview: — plots a historical overview of . . . . . overview(1)
troff output to local STARE — plotter. stare: send . . . . . stare(1C)
troff output to a local STARE — plotter. stare: send . . . . . stare.mh(1C)
and ptroff. — pmmt: typeset document with MM . . pmmt(1)
MV macros and ptroff. — pmvt: typeset viewgraph with . . . . . pmvt(1)
— pn: off line print. . . . . opr(1C)
images. — pnch: file format for card . . . . . pnch(4)
ftell: reposition a file — pointer in a stream. /rewind, . . . . . fseek(3S)
lseek: move read/write file — pointer. . . . . lseek(2)
to/from a process. — popen, pclose: initiate pipe . . . . . popen(3S)
/create login process on a — port with no existing login/ . . . . . b16login(1)
and library maintainer for — portable archives. /archive . . . . . ar(1)
p8cc: — portable BELLMAC-8 C compiler. . . p8cc(1)
basename, dirname: deliver — portions of path names. . . . . basename(1)
functions. dim, ddim, idim: — positive difference intrinsic . . . . . dim(3F)
banner: make — posters. . . . . banner(1)
articles. — postnews: submit news . . . . . postnews(1)
logarithm,/ exp, log, log10, — pow, sqrt: exponential, . . . . . exp(3M)
/sqrt: exponential, logarithm, — power, square root functions. . . . . exp(3M)
— pr: print files. . . . . pr(1)
function. dprod: double — precision product intrinsic . . . . . dprod(3F)
for otroff. ocw, checkcw: — prepare constant-width text . . . . . ocw(1)
monitor: — prepare execution profile. . . . . monitor(3C)
the Xerox 9700/ x9700: — prepare nroff documents for . . . . . x9700(1)
the Xerox 9700/ dx9700: — prepare troff documents for . . . . . dx9700(1)
cpp: the C language — preprocessor. . . . . cpp(1)
simple pictures. pic: troff — preprocessor for drawing . . . . . pic(1)
unget: undo a — previous get of an SCCS file. . . . . unget(1)
graphical/ gps: graphical — primitive string, format of . . . . . gps(4)
types: — primitive system data types. . . . . types(5)
vector. prtv: — print a Basic-16 transfer . . . . . b16prtv(1)
prs: — print an SCCS file. . . . . prs(1)
date: — print and set the date. . . . . date(1)
cal: — print calendar. . . . . cal(1)
of a file. sum: — print checksum and block count . . . . sum(1)
editing activity. sact: — print current SCCS file . . . . . sact(1)
9700 printer. mmx: — print documents on the Xerox . . . . . mmx(1)
man, manprog: — print entries in this manual. . . . . man(1)
cat: concatenate and — print files. . . . . cat(1)
pr: — print files. . . . . pr(1)
npf: nroff — print filter. . . . . npf(1)
vprintf, vfprintf, vsprintf: — print formatted output of a/ . . . . . vprintf(3S)
printf, fprintf, sprintf: — print formatted output. . . . . printf(3S)
hpr: horizontal — print. . . . . hpr(1)
correct usage of/ worduse: — print information about . . . . . worduse(1)
infinitives. splitrules: — print information about split . . . . . splitrules(1)
lpstat: — print LP status information. . . . . lpstat(1)
m8nm: — print name list. . . . . m8nm(1)
nm: — print name list. . . . . nm.pdp(1)
object file. nm: — print name list of common . . . . . nm(1)
system. uname: — print name of current UNIX . . . . . uname(1)

news: print news items. . . . . news(1)
ucat: off-line print on UNIVAC. . . . . ucat(1)
(X9700). xopr: filter to print on Xerox 9700 printer . . . . . xopr(1)
for Basic-16. man: Print on-line documentation . . . . . b16man(1)
pn: off line print. . . . . opr(1C)
opr: offline print. . . . . opr.py(1C)
entries. acc: print process accounting . . . . . acc(1)
file(s). acctcom: search and print process accounting . . . . . acctcom(1)
/check punctuation and print punctuation rules. . . . . punct(1)
object files. size: print section sizes of common . . . . . size(1)
alternatives. sexist: print sexist terms and suggest . . . . . sexist(1)
size: print sizes of object files. . . . . size.pdp(1)
pib: print specified UNIX PIB. . . . . pib(1)
prosestand: print standards used by prose. . . . . prosestand(1)
scheduler. archstat: print status of archive . . . . . archstat(1)
Workbench system/ wwbinfo: print table of Writer's . . . . . wwbinfo(1)
trail: print trail of archived files. . . . . trail(1)
names. id: print user and group IDs and . . . . . id(1)
suggest/ diction: print wordy sentences and . . . . . diction(1)
system commands for/ wwbhelp: print Writer's Workbench . . . . . wwbhelp(1)
xopr: offline print. . . . . xopr.py(1)
formatted/ mm, osdd, checkmm: print/check documents . . . . . mm(1)
functions of the XEROX 9700 printer. 9700: handle special . . . . . 9700(1)
documents for the Xerox 9700 printer. /prepare troff . . . . . dx9700(1)
requests to an LP line printer. /cancel: send/cancel . . . . . lp(1)
documents on the Xerox 9700 printer. mmx: print . . . . . mmx(1)
vpr: Versatec printer spooler. . . . . vpr(1)
filter to print on Xerox 9700 printer (X9700). xopr: . . . . . xopr(1)
documents for the Xerox 9700 printer. x9700: prepare nroff . . . . . x9700(1)
disable: enable/disable LP printers. enable, . . . . . enable(1)
print formatted output. printf, fprintf, sprintf: . . . . . printf(3S)
top of each page. pager: prints files, stopping at the . . . . . pager(1)
nice: run a command at low priority. . . . . nice(1)
nice: change priority of a process. . . . . nice(2)
send troff output to local prism device. prism: . . . . . prism(1C)
local prism device. prism: send troff output to . . . . . prism(1C)
acct: enable or disable process accounting. . . . . acct(2)
acc: print process accounting entries. . . . . acc(1)
acctcom: search and print process accounting file(s). . . . . acctcom(1)
alarm: set a process alarm clock. . . . . alarm(2)
times. times: get process and child process . . . . . times(2)
a port with no existing login process. /login process on . . . . . b16login(1)
timex: time a command; report process data and system/ . . . . . timex(1)
exit, _exit: terminate process. . . . . exit(2)
fork: create a new process. . . . . fork(2)
/getpgrp, getppid: get process, process group, and parent/ . . . . . getpid(2)
setpgrp: set process group ID. . . . . setpgrp(2)
process group, and parent process IDs. /get process, . . . . . getpid(2)
inittab: script for the init process. . . . . inittab(4)
kill: terminate a process. . . . . kill(1)
nice: change priority of a process. . . . . nice(2)
b16login: create login process on a port with no/ . . . . . b16login(1)
kill: send a signal to a process or a group of/ . . . . . kill(2)
initiate pipe to/from a process. popen, pclose: . . . . . popen(3S)
getpid, getpgrp, getppid: get process, process group, and/ . . . . . getpid(2)
ps: report process status. . . . . ps(1)
memory. plock: lock process, text, or data in . . . . . plock(2)
times: get process and child process times. . . . . times(2)

wait: wait for child process to stop or terminate. . . . . wait(2)
ptrace: process trace. . . . . ptrace(2)
pause: suspend process until signal. . . . . pause(2)
wait: await completion of process. . . . . wait(1)
list of file systems processed by fsck, checklist: . . . . . checklist(4)
mail. uurec: receive processed news articles via . . . . . uurec(1)
to a process or a group of processes. /send a signal . . . . . kill(2)
awk: pattern scanning and processing language. . . . . awk(1)
mailx: interactive message processing system. . . . . mailx(1)
m4: macro processor. . . . . m4(1)
provide truth value about your processor type. /u3b5, vax: . . . . . machid(1)
3B20S object file. list: produce C source listing from . . . . . list(1)
listing of macro/ macref: produce cross-reference . . . . . macref(1)
fl: produce form letters. . . . . fl(1)
Report for/ account: produces the IHCC Accounting . . . . account(1C)
dprod: double precision product intrinsic function. . . . . dprod(3F)
prof: display profile data. . . . . prof(1)
function. prof: profile within a . . . . . prof(5)
profile. profil: execution time . . . . . profil(2)
prof: display profile data. . . . . prof(1)
monitor: prepare execution profile. . . . . monitor(3C)
lines: profile of active lines. . . . . lines(1)
lines: profile of active lines. . . . . lines.ih(1)
profil: execution time profile. . . . . profil(2)
environment at login time. profile: setting up an . . . . . profile(4)
prof: profile within a function. . . . . prof(5)
the IHCC Accounting Report for Programmers. /produces . . . . . account(1C)
standard/restricted command programming language. /the . . . . . sh(1)
proofreader. proofr, proofer: automatic . . . . . proofr(1)
proofreader. proofr, proofer: automatic . . . . . proofr(1)
proofr, proofer: automatic proofreader. . . . . proofr(1)
characteristics of text. prose: describe style . . . . . prose(1)
calculate style standards for prose program. mkstand: . . . . . mkstand(1)
print standards used by prose. prosestand: . . . . . prosestand(1)
used by prose. prosestand: print standards . . . . . prosestand(1)
arithmetic: provide drill in number facts. . . . . arithmetic(6)
pdp11, u3b, u3b5, vax: provide truth value about your/ . . . . machid(1)
true, false: provide truth values. . . . . true(1)
prs: print an SCCS file. . . . . prs(1)
transfer vector. prtv: print a Basic-16 . . . . . b16prtv(1)
ps: report process status. . . . . ps(1)
nroff/MM. ats: transform pseudo-ats document for . . . . . ats(1)
/generate uniformly distributed pseudo-random numbers. . . . . drand48(3C)
ptrace: process trace. . . . . ptrace(2)
typeset document with MM and ptroff. pmmt: . . . . . pmmt(1)
viewgraph with MV macros and ptroff. pmvt: typeset . . . . . pmvt(1)
ptroff: typeset document. . . . . ptroff(1)
ptx: permuted index. . . . . ptx(1)
punctuation and print/ punct, punctrules: check . . . . . punct(1)
and print punctuation/ punct, punctrules: check punctuation . . . . . punct(1)
punct, punctrules: check punctuation and print/ . . . . . punct(1)
/check punctuation and print punctuation rules. . . . . punct(1)
stream. ungetc: push character back into input . . . . ungetc(3S)
put character or word on a/ putc, putchar, fputc, putw: . . . . . putc(3S)
character or word on a/ putc, putchar, fputc, putw: put . . . . . putc(3S)
environment. putenv: change or add value to . . . . putenv(3C)
group file entry. putgrent: format and write a . . . . . putgrent(3X)
field in password/ getpwcom, putpwcom: manipulate comment . . . getpwcom(3X)

entry. putpwent: write password file . . . . . putpwent(3C)
stream. puts, fputs: put a string on a . . . . . puts(3S)
getutent, getutid, getutline, pututline, setutent, endutent,/ . . . . . getut(3C)
a/ putc, putchar, fputc, putw: put character or word on . . . . putc(3S)
x25rpvc: install or remove a PVC on a link. x25ipvc, . . . . . x25ipvc(3C)
pwd: working directory name. . . . . pwd(1)
entry. pwstat: format password file . . . . . pwstat(1)
qsort: quicker sort. . . . . qsort(3C)
tput: query terminfo database. . . . . tput(1)
the NSC network. nscstat: query the operation status of . . . . . nscstat(1C)
msgget: get message queue. . . . . msgget(2)
ipcrm: remove a message queue, semaphore set or shared/ . . . . ipcrm(1)
qsort: quicker sort. . . . . qsort(3C)
command immune to hangups and quits. nohup: run a . . . . . nohup(1)
quiz: test your knowledge. . . . . quiz(6)
generator. irand, rand, srand: random number . . . . . rand(3F)
random-number generator. rand, srand: simple . . . . . rand(3C)
irand, rand, srand: random number generator. . . . . rand(3F)
rand, srand: simple random-number generator. . . . . rand(3C)
fsplit: split f77, ratfor, or efl files. . . . . fsplit(1)
dialect. ratfor: rational Fortran . . . . . ratfor(1)
cratfor: rational Fortran dialect. . . . . cratfor(1)
ratfor: rational Fortran dialect. . . . . ratfor(1)
getpass: read a password. . . . . getpass(3C)
entry of a file. ldtbread: read an indexed symbol table . . . . . ldtbread(3X)
header/ ldshread, ldnshread: read an indexed/named section . . . . ldshread(3X)
sar: seek and read data in kernel memory. . . . . sar(3X)
read: read from file. . . . . read(2)
rmail: send mail to users or read mail. mail, . . . . . mail(1)
readnews: read news articles. . . . . readnews(1)
line: read one line. . . . . line(1)
read: read from file. . . . . read(2)
common object file. ldfhread: read the file header of a . . . . . ldfhread(3X)
an archive file. ldahread: read the header of a member of . . . . ldahread(3X)
open a common object file for reading. ldopen, ldaopen: . . . . . ldopen(3X)
open: open for reading or writing. . . . . open(2)
newsrc: information file for readnews and checknews. . . . . newsrc(5)
readnews: read news articles. . . . . readnews(1)
tape. m4receive: Reads m4we input data from . . . . . m4receive(1)
lseek: move read/write file pointer. . . . . lseek(2)
cmplx,/ int, ifix, idint, real, float, sngl, dble, . . . . . ftype(3F)
allocator. malloc, free, realloc, calloc: main memory . . . . . malloc(3C)
mallinfo: fast/ malloc, free, realloc, calloc, mallopt, . . . . . malloc(3X)
specify what to do upon receipt of a signal. signal: . . . . . signal(2)
/specify Fortran action on receipt of a system signal. . . . . signal(3F)
articles via mail. uurec: receive processed news . . . . . uurec(1)
getback: retrieve recently written file. . . . . getback(1)
for Remote Job Entry. cacf: Record ACF2 access information . . . cacf(1)
ed, red: text editor. . . . . ed(1)
execute regular expression. regcmp, regex: compile and . . . . . regcmp(3X)
compile. regcmp: regular expression . . . . . regcmp(1)
make: maintain, update, and regenerate groups of programs. . . . . make(1)
regular expression. regcmp, regex: compile and execute . . . . . regcmp(3X)
compile and match routines. regexp: regular expression . . . . . regexp(5)
administer CAI/ teach: register students and . . . . . teach(1)
un53ctl: sets the registers of the/ . . . . . un53ctl(1C)
match routines. regexp: regular expression compile and . . . . regexp(5)
regcmp: regular expression compile. . . . . regcmp(1)

regex: compile and execute regular expression. regcmp, . . . . . regcmp(3X)
sorted files. comm: select or reject lines common to two . . . . . comm(1)
lorder: find ordering relation for an object/ . . . . . b16lorder(1)
lorder: find ordering relation for an object/ . . . . . lorder(1)
join: relational database operator. . . . . join(1)
for a Basic-16 object file. reloc: relocation information . . . . . reloc.div(4)
for a common object file. reloc: relocation information . . . . . reloc(4)
strip: remove symbols and relocation bits. . . . . strip.pdp(1)
ldrseek, ldnrseek: seek to relocation entries of a/ . . . . . ldrseek(3X)
Basic-16 object file. reloc: relocation information for a . . . . . reloc.div(4)
common object file. reloc: relocation information for a . . . . . reloc(4)
/fmod, fabs: floor, ceiling, remainder, absolute value/ . . . . . floor(3M)
mod, amod, dmod: Fortran remaindering intrinsic/ . . . . . mod(3F)
calendar: reminder service. . . . . calendar(1)
for CP/M Terminals. umodem: Remote File Transfer Facility . . . . . umodem(1)
remote: get IBM remote number. . . . remote(1)
ACF2 access information for Remote Job Entry. /Record . . . . . cacf(1)
ulib: uniform remote library editor. . . . . ulib(1)
remote: get IBM remote number. . . . . remote(1)
ct: spawn getty to a remote terminal. . . . . ct(1C)
file. rmdel: remove a delta from an SCCS . . . . rmdel(1)
semaphore set or/ ipcrm: remove a message queue, . . . . . ipcrm(1)
x25ipvc, x25rpvc: install or remove a PVC on a link. . . . . x25ipvc(3C)
unlink: remove directory entry. . . . . unlink(2)
rm, rmdir: remove files or directories. . . . . rm(1)
eqn constructs. deroff: remove nroff/troff, tbl, and . . . . . deroff(1)
bits. strip: remove symbols and relocation . . . . strip.pdp(1)
uniq: report repeated lines in a file. . . . . uniq(1)
console. rjestat: RJE status report and interactive status . . . . . rjestat(1C)
clock: report CPU time used. . . . . clock(3C)
/produces the IHCC Accounting Report for Programmers. . . . . account(1C)
communication/ ipcs: report inter-process . . . . . ipcs(1)
timex: time a command; report process data and system/ . . . . timex(1)
ps: report process status. . . . . ps(1)
file. uniq: report repeated lines in a . . . . . uniq(1)
facilities status. ststat: report synchronous terminal . . . . . ststat(1)
trenter: enter a trouble report. . . . . trenter(1)
sar: system activity reporter. . . . . sar(1)
fr: generate fiscal accounting reports. . . . . fr(1)
stream. fseek, rewind, ftell: reposition a file pointer in a . . . . . fseek(3S)
phototypesetter jobs/ apstat: request status of APS-5 . . . . . apstat(1)
typesetter jobs. phstat: request status of submitted . . . . . phstat(1C)
lp, cancel: send/cancel requests to an LP line/ . . . . . lp(1)
itds: Send document requests to ITDS. . . . . itds(1)
network to RJE. nsctorje: re-route jobs from the NSC . . . . . nsctorje(1C)
daysum: summarize USORS daily response time distributions. . . . . daysum(1)
usors: collect UNIX response time information. . . . . usors(1)
dayplot: plot USORS daily response time percentiles. . . . . dayplot(1)
/a historical overview of USORS response time summaries. . . . . overview(1)
systems. syscompare: compare response-time histories across . . . . . syscompare(1)
the BTL Bibliography. bibl: retrieve and list items from . . . . . bibl(1)
archive: archive and retrieve files. . . . . archive.mh(1)
archive: send files to and retrieve files from archives. . . . . archive.div(1)
file. getback: retrieve recently written . . . . . getback(1)
common object/ ldgetname: retrieve symbol name for . . . . . ldgetname(3X)
argument. getarg: return Fortran command-line . . . . . getarg(3F)
variable. getenv: return Fortran environment . . . . . getenv(3F)
accounting. mclock: return Fortran time . . . . . mclock(3F)

abs: return integer absolute value. . . . . abs(3C)
string. len: return length of Fortran . . . . . len(3F)
substring. index: return location of Fortran . . . . . index(3F)
logname: return login name of user. . . . . logname(3X)
name. getenv: return value for environment . . . . . getenv(3C)
stat: data returned by stat system call. . . . . stat(5)
for specified user-id. whois: returns password file entry . . . . . whois(1)
reversi: a game of dramatic reversals. . . . . reversi(6)
col: filter reverse line-feeds. . . . . col(1)
reversals. reversi: a game of dramatic . . . . . reversi(6)
file pointer in a/ fseek, rewind, ftell: reposition a . . . . . fseek(3S)
creat: create a new file or rewrite an existing one. . . . . creat(2)
gather files and/or submit RJE jobs. send, gath: . . . . . send(1C)
jobs from the NSC network to RJE. nsctorje: re-route . . . . . nsctorje(1C)
interactive status/ rjestat: RJE status report and . . . . . rjestat(1C)
interactive status console. rjestat: RJE status report and . . . . . rjestat(1C)
directories. rm, rmdir: remove files or . . . . . rm(1)
read mail. mail, rmail: send mail to users or . . . . . mail(1)
SCCS file. rmdel: remove a delta from an . . . . rmdel(1)
directories. rm, rmdir: remove files or . . . . . rm(1)
of Doom (Version 9). super rogue: exploring The Dungeons . . . . rogue(6)
/BELLMAC-4 microcomputer ROM and PLA XY mask. . . . . m4we(1)
chroot: change root directory. . . . . chroot(2)
logarithm, power, square root functions. /exponential, . . . . . exp(3M)
/dsqrt, csqrt: Fortran square root intrinsic function. . . . . sqrt(3F)
insrg: ins route generator. . . . . insrg(1)
/tekset, td: graphical device routines and filters. . . . . gdev(1G)
common object file access routines. ldfcn: . . . . . ldfcn(4)
expression compile and match routines. regexp: regular . . . . . regexp(5)
graphical table of contents routines. toc: . . . . . toc(1G)
standard/restricted/ sh, rsh: shell, the . . . . . sh(1)
and, or, xor, not, lshift, rshift: Fortran bitwise/ . . . . . bool(3F)
and print punctuation rules. /check punctuation . . . . . punct(1)
nice: run a command at low priority. . . . . nice(1)
hangups and quits. nohup: run a command immune to . . . . . nohup(1)
editing activity. sact: print current SCCS file . . . . . sact(1)
sag: system activity graph. . . . . sag(1G)
kernel memory. sar: seek and read data in . . . . . sar(3X)
sar: system activity reporter. . . . . sar(1)
space allocation. brk, sbrk: change data segment . . . . . brk(2)
formatted input. scanf, fscanf, sscanf: convert . . . . . scanf(3S)
bfs: big file scanner. . . . . bfs(1)
language. awk: pattern scanning and processing . . . . . awk(1)
stand-alone programs. scc: C compiler for . . . . . scc(1)
the delta commentary of an SCCS delta. cdc: change . . . . . cdc(1)
comb: combine SCCS deltas. . . . . comb(1)
make a delta (change) to an SCCS file. delta: . . . . . delta(1)
sact: print current SCCS file editing activity. . . . . sact(1)
get: get a version of an SCCS file. . . . . get(1)
prs: print an SCCS file. . . . . prs(1)
rmdel: remove a delta from an SCCS file. . . . . rmdel(1)
compare two versions of an SCCS file. sccsdiff: . . . . . sccsdiff(1)
sccsfile: format of SCCS file. . . . . sccsfile(4)
undo a previous get of an SCCS file. unget: . . . . . unget(1)
val: validate SCCS file. . . . . val(1)
admin: create and administer SCCS files. . . . . admin(1)
what: identify SCCS files. . . . . what(1)
of an SCCS file. sccsdiff: compare two versions . . . . . sccsdiff(1)

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|---|---|---|
| | sccsfile: format of SCCS file. | sccsfile(4) |
| print status of archive | scheduler. archstat: | archstat(1) |
| Basic-16 object file. | scnhdr: section header for a | scnhdr.div(4) |
| common object file. | scnhdr: section header for a | scnhdr(4) |
| terminals. se: | screen editor for video | se(1) |
| optimization/ curses: CRT | screen handling and | curses(3X) |
| display editor based on/ vi: | screen-oriented (visual) | vi(1) |
| inittab: | script for the init process. | inittab(4) |
| | sdb: symbolic debugger. | sdb(1) |
| program. | sdiff: side-by-side difference | sdiff(1) |
| terminals. | se: screen editor for video | se(1) |
| grep, egrep, fgrep: | search a file for a pattern. | grep(1) |
| bsearch: binary | search a sorted table. | bsearch(3C) |
| accounting file(s). acctcom: | search and print process | acctcom(1) |
| lsearch, lfind: linear | search and update. | lsearch(3C) |
| hcreate, hdestroy: manage hash | search tables. hsearch, | hsearch(3C) |
| tdelete, twalk: manage binary | search trees. tsearch, tfind, | tsearch(3C) |
| jotto: | secret word game. | jotto(6) |
| object file. scnhdr: | section header for a Basic-16 | scnhdr.div(4) |
| object file. scnhdr: | section header for a common | scnhdr(4) |
| /read an indexed/named | section header of a file. | ldshread(3X) |
| to relocation entries of a | section of a file. /seek | ldrseek(3X) |
| seek to an indexed/named | section of a file. /ldnsseek: | ldsseek(3X) |
| files. size: print | section sizes of common object | size(1) |
| | sed: stream editor. | sed(1) |
| /mrand48, jrand48, srand48, | seed48, lcong48: generate/ | drand48(3C) |
| memory. sar: | seek and read data in kernel | sar(3X) |
| section of/ ldsseek, ldnsseek: | seek to an indexed/named | ldsseek(3X) |
| common/ ldlseek, ldnlseek: | seek to line number of a | ldlseek(3X) |
| a section/ ldrseek, ldnrseek: | seek to relocation entries of | ldrseek(3X) |
| header of a file. ldohseek: | seek to the optional file | ldohseek(3X) |
| common object file. ldtbseek: | seek to the symbol table of a | ldtbseek(3X) |
| shmget: get shared memory | segment. | shmget(2) |
| brk, sbrk: change data | segment space allocation. | brk(2) |
| to two sorted files. comm: | select or reject lines common | comm(1) |
| greek: | select terminal filter. | greek(1) |
| of a file. cut: cut out | selected fields of each line | cut(1) |
| file. dump: dumps | selected parts of an object | b16dump(1) |
| file. dump: dump | selected parts of an object | dump(1) |
| semctl: | semaphore control operations. | semctl(2) |
| semop: | semaphore operations. | semop(2) |
| ipcrm: remove a message queue, | semaphore set or shared memory/ | ipcrm(1) |
| semget: get set of | semaphores. | semget(2) |
| operations. | semctl: semaphore control | semctl(2) |
| | semget: get set of semaphores. | semget(2) |
| | semop: semaphore operations. | semop(2) |
| a group of processes. kill: | send a signal to a process or | kill(2) |
| ITDS. itds: | Send document requests to | itds(1) |
| fsend: | send files. | fsend(1C) |
| files from archives. archive: | send files to and retrieve | archive.div(1) |
| the JES3 network. usend: | send files to another UNIX on | usend(1C) |
| the NSC network. nusend: | send files to another UNIX on | nusend(1C) |
| and/or submit RJE jobs. | send, gath: gather files | send(1C) |
| administrator. gripe: | send mail to system | gripe.mh(1) |
| mail. mail, rmail: | send mail to users or read | mail(1) |
| device-independent/ apsend: | send output from | apsend(1) |
| STARE plotter. stare: | send troff output to a local | stare.mh(1C) |
| prism device. prism: | send troff output to local | prism(1C) |

STARE plotter. stare: send troff output to local . . . . . stare(1C)
typesetter. photo: send troff output to MH . . . . . photo(1C)
line printer. lp, cancel: send/cancel requests to an LP . . . . . lp(1)
diction: print wordy sentences and suggest/ . . . . . diction(1)
buffering to a stream. setbuf, setvbuf: assign . . . . . setbuf(3S)
IDs. setuid, setgid: set user and group . . . . . setuid(2)
getgrent, getgrgid, getgrnam, setgrent, endgrent, fgetgrent:/ . . . . . getgrent(3C)
goto. setjmp, longjmp: non-local . . . . . setjmp(3C)
encryption. crypt, setkey, encrypt: generate DES . . . . crypt(3C)
setpgrp: set process group ID. . . . . setpgrp(2)
getpwent, getpwuid, getpwnam, setpwent, endpwent, fgetpwent:/ . . . . getpwent(3C)
communications/ un53ctl: sets the registers of the . . . . . un53ctl(1C)
login time. profile: setting up an environment at . . . . . profile(4)
gettydefs: speed and terminal settings used by getty. . . . . gettydefs(4)
group IDs. setuid, setgid: set user and . . . . . setuid(2)
/getutid, getutline, pututline, setutent, endutent, utmpname:/ . . . . getut(3C)
stream. setbuf, setvbuf: assign buffering to a . . . . . setbuf(3S)
user's diction, spellwwb, or sexist dictionary. /phrases to . . . . . dictadd(1)
suggest alternatives. sexist: print sexist terms and . . . . . sexist(1)
alternatives. sexist: print sexist terms and suggest . . . . . sexist(1)
data in a/ sputl, sgetl: access long integer . . . . . sputl(3X)
conv: Basic-16 SGS Object File Converter. . . . . b16conv(1)
standard/restricted command/ sh, rsh: shell, the . . . . . sh(1)
operations. shmctl: shared memory control . . . . . shmctl(2)
queue, semaphore set or shared memory id. /a message . . . . ipcrm(1)
/multiple-access-user-space (shared memory) operations. . . . . maus(2)
shmop: shared memory operations. . . . . shmop(2)
shmget: get shared memory segment. . . . . shmget(2)
system: issue a shell command from Fortran. . . . . system(3F)
system: issue a shell command. . . . . system(3S)
shl: shell layer manager. . . . . shl(1)
command programming/ sh, rsh: shell, the standard/restricted . . . . . sh(1)
shl: shell layer manager. . . . . shl(1)
operations. shmctl: shared memory control . . . . shmctl(2)
segment. shmget: get shared memory . . . . . shmget(2)
operations. shmop: shared memory . . . . . shmop(2)
program. sdiff: side-by-side difference . . . . . sdiff(1)
transfer-of-sign intrinsic/ sign, isign, dsign: Fortran . . . . . sign(3F)
login: sign on. . . . . login(1)
terminal. stlogin: sign on to synchronous . . . . . stlogin(1)
pause: suspend process until signal. . . . . pause(2)
what to do upon receipt of a signal. signal: specify . . . . . signal(2)
action on receipt of a system signal. /specify Fortran . . . . . signal(3F)
on receipt of a system/ signal: specify Fortran action . . . . . signal(3F)
upon receipt of a signal. signal: specify what to do . . . . . signal(2)
of processes. kill: send a signal to a process or a group . . . . . kill(2)
ssignal, gsignal: software signals. . . . . ssignal(3C)
Translator. imalt: Simple Graphics Language . . . . . imalt(1G)
lex: generate programs for simple lexical tasks. . . . . lex(1)
troff preprocessor for drawing simple pictures. pic: . . . . . pic(1)
generator. rand, srand: simple random-number . . . . . rand(3C)
microprocessor. m8sim: simulator for the BELLMAC-8 . . . . m8sim(1)
atan, atan2: trigonometric/ sin, cos, tan, asin, acos, . . . . . trig(3M)
intrinsic function. sin, dsin, csin: Fortran sine . . . . . sin(3F)
sin, dsin, csin: Fortran sine intrinsic function. . . . . sin(3F)
/dsinh: Fortran hyperbolic sine intrinsic function. . . . . sinh(3F)
functions. sinh, cosh, tanh: hyperbolic . . . . . sinh(3M)
hyperbolic sine intrinsic/ sinh, dsinh: Fortran . . . . . sinh(3F)

size: Basic-16 size. . . . . b16size(1)
size: Basic-16 size. . . . . b16size(1)
m8size: size of an object file. . . . . m8size(1)
common object files. size: print section sizes of . . . . . size(1)
files. size: print sizes of object . . . . . size.pdp(1)
size: print section sizes of common object files. . . . . size(1)
size: print sizes of object files. . . . . size.pdp(1)
sky: obtain ephemerides. . . . . sky(6)
an interval. sleep: suspend execution for . . . . . sleep(1)
interval. sleep: suspend execution for . . . . . sleep(3C)
documents, viewgraphs, and slides. mmt, mvt: typeset . . . . . mmt(1)
for typesetting viewgraphs and slides. /a troff macro package . . . . . mv(5)
current/ ttyslot: find the slot in the utmp file of the . . . . . ttyslot(3C)
spline: interpolate smooth curve. . . . . spline(1G)
int, ifix, idint, real, float, sngl, dble, cmplx, dcmplx,/ . . . . . ftype(3F)
sno: SNOBOL interpreter. . . . . sno(1)
sno: SNOBOL interpreter. . . . . sno(1)
pg: file perusal filter for soft-copy terminals. . . . . pg(1)
ssignal, gsignal: software signals. . . . . ssignal(3C)
b16sts: Basic-16 Software Testing System. . . . . b16sts(1)
sort: sort and/or merge files. . . . . sort(1)
qsort: quicker sort. . . . . qsort(3C)
sort: sort and/or merge files. . . . . sort(1)
tsort: topological sort. . . . . tsort(1)
or reject lines common to two sorted files. comm: select . . . . . comm(1)
bsearch: binary search a sorted table. . . . . bsearch(3C)
whereis: locate binary, source and/or manual pages. . . . . whereis(1)
and line lister for the C source line. /dis-assembler . . . . . p8list(1)
object file. list: produce C source listing from 3B20S . . . . . list(1)
terminals. sp: filter for display . . . . . sp(1)
brk, sbrk: change data segment space allocation. . . . . brk(2)
terminal. ct: spawn getty to a remote . . . . . ct(1C)
sys3b: 3B20S specific system calls. . . . . sys3b(2)
fspec: format specification in text files. . . . . fspec(4)
pib: print specified UNIX PIB. . . . . pib(1)
password file entry for specified user-id. /returns . . . . . whois(1)
receipt of a system/ signal: specify Fortran action on . . . . . signal(3F)
receipt of a signal. signal: specify what to do upon . . . . . signal(2)
parts: part of speech assignment. . . . . parts(1)
used by getty. gettydefs: speed and terminal settings . . . . . gettydefs(4)
hashcheck: find spelling/ spell, hashmake, spellin, . . . . . spell(1)
spelling dictionary. spelladd: add words to user . . . . . spelladd(1)
spelling/ spell, hashmake, spellin, hashcheck: find . . . . . spell(1)
spelladd: add words to user spelling dictionary. . . . . spelladd(1)
spellin, hashcheck: find spelling errors. /hashmake, . . . . . spell(1)
spellwwb: find spelling errors. . . . . spellwwb(1)
spelltell: find the correct spelling of a word. . . . . spelltell(1)
spelling of a word. spelltell: find the correct . . . . . spelltell(1)
errors. spellwwb: find spelling . . . . . spellwwb(1)
add phrases to user's diction, spellwwb, or sexist/ dictadd: . . . . . dictadd(1)
curve. spline: interpolate smooth . . . . . spline(1G)
split: split a file into pieces. . . . . split(1)
csplit: context split. . . . . csplit(1)
files. fsplit: split f77, ratfor, or efl . . . . . fsplit(1)
/print information about split infinitives. . . . . splitrules(1)
pieces. split: split a file into . . . . . split(1)
about split infinitives. splitrules: print information . . . . . splitrules(1)
n-block pieces. bsplit: splits standard input into . . . . . bsplit(1)

vpr: Versatec printer spooler. . . . . vpr(1)
output. printf, fprintf, sprintf: print formatted . . . . . printf(3S)
integer data in a/ sputl, sgetl: access long . . . . . sputl(3X)
square root intrinsic/ sqrt, dsqrt, csqrt: Fortran . . . . . sqrt(3F)
power,/ exp, log, log10, pow, sqrt: exponential, logarithm, . . . . . exp(3M)
exponential, logarithm, power, square root functions. /sqrt: . . . . . exp(3M)
sqrt, dsqrt, csqrt: Fortran square root intrinsic/ . . . . . sqrt(3F)
generator. irand, rand, srand: random number . . . . . rand(3F)
generator. rand, srand: simple random-number . . . . . rand(3C)
/nrand48, mrand48, jrand48, srand48, seed48, lcong48:/ . . . . . drand48(3C)
sroff: format text. . . . . sroff(1)
compatibility/ mmlint: sroff/MM nroff/MM document . . . . mmlint(1)
input. scanf, fscanf, sscanf: convert formatted . . . . . scanf(3S)
signals. ssignal, gsignal: software . . . . . ssignal(3C)
scc: C compiler for stand-alone programs. . . . . scc(1)
package. stdio: standard buffered input/output . . . . stdio(3S)
pieces. bsplit: splits standard input into n-block . . . . . bsplit(1)
communication package. ftok: standard interprocess . . . . . stdipc(3C)
sh, rsh: shell, the standard/restricted command/ . . . . sh(1)
mkstand: calculate style standards for prose program. . . . . mkstand(1)
prosestand: print standards used by prose. . . . . prosestand(1)
send troff output to local STARE plotter. stare: . . . . . stare(1C)
send troff output to a local STARE plotter. stare: . . . . . stare.mh(1C)
local STARE plotter. stare: send troff output to a . . . . . stare.mh(1C)
local STARE plotter. stare: send troff output to . . . . . stare(1C)
system call. stat: data returned by stat . . . . . stat(5)
stat, fstat: get file status. . . . . stat(2)
useful with graphical/ stat: statistical network . . . . . stat(1G)
stat: data returned by stat system call. . . . . stat(5)
with graphical/ stat: statistical network useful . . . . . stat(1G)
ustat: get file system statistics. . . . . ustat(2)
status: Display for the Unix Status and Exception Monitor. . . . status(1)
status report and interactive status console. rjestat: RJE . . . . . rjestat(1C)
Status and Exception Monitor. status: Display for the Unix . . . . . status(1)
lpstat: print LP status information. . . . . lpstat(1)
feof, clearerr, fileno: stream status inquiries. ferror, . . . . . ferror(3S)
control. uustat: uucp status inquiry and job . . . . . uustat(1C)
communication facilities status. /report inter-process . . . . . ipcs(1)
apstat: request status of APS-5/ . . . . . apstat(1)
archstat: print status of archive scheduler. . . . . archstat(1)
jobs. phstat: request status of submitted typesetter . . . . . phstat(1C)
nscstat: query the operation status of the NSC network. . . . . nscstat(1C)
ps: report process status. . . . . ps(1)
status console. rjestat: RJE status report and interactive . . . . . rjestat(1C)
stat, fstat: get file status. . . . . stat(2)
terminal facilities status. /report synchronous . . . . . ststat(1)
input/output package. stdio: standard buffered . . . . . stdio(3S)
stime: set time. . . . . stime(2)
synchronous terminal. stlogin: sign on to . . . . . stlogin(1)
wait for child process to stop or terminate. wait: . . . . . wait(2)
page. pager: prints files, stopping at the top of each . . . . . pager(1)
strncmp, strcpy, strncpy,/ strcat, strncat, strcmp, . . . . . string(3C)
/strcpy, strncpy, strlen, strchr, strrchr, strpbrk,/ . . . . . string(3C)
strncpy,/ strcat, strncat, strcmp, strncmp, strcpy, . . . . . string(3C)
/strncat, strcmp, strncmp, strcpy, strncpy, strlen,/ . . . . . string(3C)
/strrchr, strpbrk, strspn, strcspn, strtok: string/ . . . . . string(3C)
sed: stream editor. . . . . sed(1)
fflush: close or flush a stream. fclose, . . . . . fclose(3S)

fopen, freopen, fdopen: open a stream. . . . . fopen(3S)
reposition a file pointer in a stream. fseek, rewind, ftell: . . . . . fseek(3S)
get character or word from a stream. /getchar, fgetc, getw: . . . . . getc(3S)
fgets: get a string from a stream. gets, . . . . . gets(3S)
put character or word on a stream. /putchar, fputc, putw: . . . . putc(3S)
puts, fputs: put a string on a stream. . . . . puts(3S)
setvbuf: assign buffering to a stream. setbuf, . . . . . setbuf(3S)
/feof, clearerr, fileno: stream status inquiries. . . . . ferror(3S)
push character back into input stream. ungetc: . . . . . ungetc(3S)
long integer and base-64 ASCII string. /l64a: convert between . . . . . a64l(3C)
lge, lgt, lle, llt: string comparision intrinsic/ . . . . . strcmp(3F)
convert date and time to string. /asctime, tzset: . . . . . ctime(3C)
floating-point number to string. /fcvt, gcvt: convert . . . . . ecvt(3C)
gps: graphical primitive string, format of graphical/ . . . . . gps(4)
gets, fgets: get a string from a stream. . . . . gets(3S)
len: return length of Fortran string. . . . . len(3F)
puts, fputs: put a string on a stream. . . . . puts(3S)
strspn, strcspn, strtok: string operations. /strpbrk, . . . . . string(3C)
number. strtod, atof: convert string to double-precision . . . . . strtod(3C)
strtol, atol, atoi: convert string to integer. . . . . strtol(3C)
strip: Basic-16 strip. . . . . b16strip(1)
strip: Basic-16 strip. . . . . b16strip(1)
relocation bits. strip: remove symbols and . . . . . strip.pdp(1)
number information from a/ strip: strip symbol and line . . . . . strip(1)
information from a/ strip: strip symbol and line number . . . . . strip(1)
/strncmp, strcpy, strncpy, strlen, strchr, strrchr,/ . . . . . string(3C)
strcpy, strncpy,/ strcat, strncat, strcmp, strncmp, . . . . . string(3C)
strcat, strncat, strcmp, strncmp, strcpy, strncpy,/ . . . . . string(3C)
/strcmp, strncmp, strcpy, strncpy, strlen, strchr,/ . . . . . string(3C)
/strlen, strchr, strrchr, strpbrk, strspn, strcspn,/ . . . . . string(3C)
/strncpy, strlen, strchr, strrchr, strpbrk, strspn,/ . . . . . string(3C)
/strchr, strrchr, strpbrk, strspn, strcspn, strtok:/ . . . . . string(3C)
to double-precision number. strtod, atof: convert string . . . . . strtod(3C)
/strpbrk, strspn, strcspn, strtok: string operations. . . . . string(3C)
string to integer. strtol, atol, atoi: convert . . . . . strtol(3C)
transfer vector entry. tv: structure for Basic-16 . . . . . tv(4)
cstruct: structure Fortran programs. . . . . cstruct(1)
terminal facilities status. ststat: report synchronous . . . . . ststat(1)
terminal. stty: set the options for a . . . . . stty(1)
materials. teach: register students and administer CAI . . . . . teach(1)
characteristics of a/ style: analyze surface . . . . . style(1)
prose: describe style characteristics of text. . . . . prose(1)
program. mkstand: calculate style standards for prose . . . . . mkstand(1)
texts. match: compare style tables from two or more . . . . . match(1)
another user. su: become super-user or . . . . . su(1)
/create a Cray-1 job and submit it for execution. . . . . c1send(1)
inews: submit news articles. . . . . inews(1)
postnews: submit news articles. . . . . postnews(1)
gath: gather files and/or submit RJE jobs. send, . . . . . send(1C)
usl: uniform job submittal language. . . . . usl(1)
of APS-5 phototypesetter jobs submitted. /request status . . . . . apstat(1)
phstat: request status of submitted typesetter jobs. . . . . phstat(1C)
intro: introduction to subroutines and libraries. . . . . intro(3)
plot: graphics interface subroutines. . . . . plot(3X)
/same lines of several files or subsequent lines of one file. . . . . paste(1)
return location of Fortran substring. index: . . . . . index(3F)
/print wordy sentences and suggest alternatives. . . . . diction(1)
sexist: print sexist terms and suggest alternatives. . . . . sexist(1)

count of a file. sum: print checksum and block . . . . sum(1)
of USORS response time summaries. /overview . . . . . overview(1)
du: summarize disk usage. . . . . du(1)
daily data and maintain/ summarize: summarize USORS . . . . summarize(5)
maintain files. summarize: summarize USORS daily data and . . summarize(5)
time distributions. daysum: summarize USORS daily response . . . daysum(1)
sync: update the super block. . . . . sync(1)
Dungeons of Doom (Version 9). super rogue: exploring The . . . . . rogue(6)
sync: update super-block. . . . . sync(2)
su: become super-user or another user. . . . . su(1)
document. style: analyze surface characteristics of a . . . . . style(1)
interval. sleep: suspend execution for an . . . . . sleep(1)
interval. sleep: suspend execution for . . . . . sleep(3C)
pause: suspend process until signal. . . . . pause(2)
swab: swap bytes. . . . . swab(3C)
swab: swap bytes. . . . . swab(3C)
syl: syllable counter. . . . . syl(1)
syl: syllable counter. . . . . syl(1)
information from/ strip: strip symbol and line number . . . . . strip(1)
file. ldgetname: retrieve symbol name for common object . . . ldgetname(3X)
/compute the index of a symbol table entry of a file. . . . . ldtbindex(3X)
ldtbread: read an indexed symbol table entry of a file. . . . . ldtbread(3X)
syms: common object file symbol table format. . . . . syms(4)
object/ ldtbseek: seek to the symbol table of a common . . . . . ldtbseek(3X)
BELLMAC-4 Development System symbolic debugger. m4mate: . . . . . m4mate(1)
BELLMAC-8 Development System Symbolic Debugger. m8db: . . . . . m8db(1)
sdb: symbolic debugger. . . . . sdb(1)
strip: remove symbols and relocation bits. . . . . strip.pdp(1)
symbol table format. syms: common object file . . . . . syms(4)
sync: update super-block. . . . . sync(2)
sync: update the super block. . . . . sync(1)
facilities/ ststat: report synchronous terminal . . . . . ststat(1)
stlogin: sign on to synchronous terminal. . . . . stlogin(1)
calls. sys3b: 3B20S specific system . . . . . sys3b(2)
response-time histories/ syscompare: compare . . . . . syscompare(1)
error/ perror, errno, sys_errlist, sys_nerr: system . . . . . perror(3C)
current system list. syslist: modify or echo . . . . . syslist(1)
perror, errno, sys_errlist, sys_nerr: system error/ . . . . . perror(3C)
tabs: discussion of tab handling on UNIXTm. . . . . tabs(5)
binary search a sorted table. bsearch: . . . . . bsearch(3C)
/compute the index of a symbol table entry of a file. . . . . ldtbindex(3X)
/read an indexed symbol table entry of a file. . . . . ldtbread(3X)
common object file symbol table format. syms: . . . . . syms(4)
master device information table. master: . . . . . master.dec(4)
master device information table. master: . . . . . master.u3b(4)
mnttab: mounted file system table. . . . . mnttab(4)
ldtbseek: seek to the symbol table of a common object file. . . . . ldtbseek(3X)
toc: graphical table of contents routines. . . . . toc(1G)
system/ wwbinfo: print table of Writer's Workbench . . . . . wwbinfo(1)
ASCII to EBCDIC conversion tables. aetab, eatab: . . . . . aetab(3)
tbl: format tables for nroff or troff. . . . . tbl(1)
match: compare style tables from two or more texts. . . . . match(1)
hdestroy: manage hash search tables. hsearch, hcreate, . . . . . hsearch(3C)
handling on UNIXTm. tabs: discussion of tab . . . . . tabs(5)
tabs: set tabs on a terminal. . . . . tabs(1)
tabs: set tabs on a terminal. . . . . tabs(1)
a file. tail: deliver the last part of . . . . . tail(1)
trigonometric/ sin, cos, tan, asin, acos, atan, atan2: . . . . . trig(3M)

intrinsic function. tan, dtan: Fortran tangent . . . . . tan(3F)
tan, dtan: Fortran tangent intrinsic function. . . . . tan(3F)
/dtanh: Fortran hyperbolic tangent intrinsic function. . . . . tanh(3F)
hyperbolic tangent intrinsic/ tanh, dtanh: Fortran . . . . . tanh(3F)
sinh, cosh, tanh: hyperbolic functions. . . . . sinh(3M)
hpio: HP 2645A terminal tape file archiver. . . . . hpio(1)
tar: tape file archiver. . . . . tar(1)
Reads m4we input data from tape. m4receive: . . . . . m4receive(1)
Writes m4we input data to tape. m4send: . . . . . m4send(1)
tar: tape file archiver. . . . . tar(1)
file/ b16config: b16sts target machine configuration . . . . . b16config(1)
programs for simple lexical tasks. lex: generate . . . . . lex(1)
deroff: remove nroff/troff, tbl, and eqn constructs. . . . . deroff(1)
or troff. tbl: format tables for nroff . . . . . tbl(1)
interpreter. tc, otc: troff output . . . . . tc(1)
hpd, erase, hardcopy, tekset, td: graphical device routines/ . . . . . gdev(1G)
search trees. tsearch, tfind, tdelete, twalk: manage binary . . . . . tsearch(3C)
administer CAI materials. teach: register students and . . . . . teach(1)
tee: pipe fitting. . . . . tee(1)
hpd, erase, hardcopy, tekset, td: graphical device/ . . . . . gdev(1G)
4014: paginator for the Tektronix 4014 terminal. . . . . 4014(1)
temporary file. tmpnam, tempnam: create a name for a . . . . tmpnam(3S)
tmpfile: create a temporary file. . . . . tmpfile(3S)
tempnam: create a name for a temporary file. tmpnam, . . . . . tmpnam(3S)
terminals. term: conventional names for . . . . . term(5)
term: format of compiled term file. . . . . term(4)
file. term: format of compiled term . . . . term(4)
functions of Trendata 4000A terminal. /handle special . . . . . 4000A(1)
for the Tektronix 4014 terminal. 4014: paginator . . . . . 4014(1)
functions of the DASI 450 terminal. 450: handle special . . . . . 450(1)
terminfo: terminal capability data base. . . . . terminfo(4)
ct: spawn getty to a remote terminal. . . . . ct(1C)
generate file name for terminal. ctermid: . . . . . ctermid(3S)
fixit: CRT terminal editing functions. . . . . fixit(1)
ststat: report synchronous terminal facilities status. . . . . ststat(1)
greek: select terminal filter. . . . . greek(1)
dial: establish an out-going terminal line connection. . . . . dial(3C)
logtty: get login terminal name. . . . . logtty(1)
getty. gettydefs: speed and terminal settings used by . . . . . gettydefs(4)
sign on to synchronous terminal. stlogin: . . . . . stlogin(1)
stty: set the options for a terminal. . . . . stty(1)
tabs: set tabs on a terminal. . . . . tabs(1)
hpio: HP 2645A terminal tape file archiver. . . . . hpio(1)
tty: get the name of the terminal. . . . . tty(1)
ttyin: input data from terminal. . . . . ttyin(1)
isatty: find name of a terminal. ttyname, . . . . . ttyname(3C)
functions of DASI 300 and 300s terminals. /handle special . . . . . 300(1)
of HP 2640 and 2621-series terminals. /special functions . . . . . hp(1)
perusal filter for soft-copy terminals. pg: file . . . . . pg(1)
pgr: pager for crt terminals. . . . . pgr(1)
se: screen editor for video terminals. . . . . se(1)
sp: filter for display terminals. . . . . sp(1)
term: conventional names for terminals. . . . . term(5)
Transfer Facility for CP/M Terminals. /Remote File . . . . . umodem(1)
kill: terminate a process. . . . . kill(1)
abort: terminate Fortran program. . . . . abort(3F)
exit, _exit: terminate process. . . . . exit(2)
for child process to stop or terminate. wait: wait . . . . . wait(2)

tput: query terminfo database. . . . . tput(1)
data base. terminfo: terminal capability . . . . . terminfo(4)
sexist: print sexist terms and suggest/ . . . . . sexist(1)
command. test: condition evaluation . . . . . test(1)
quiz: test your knowledge. . . . . quiz(6)
b16sts: Basic-16 Software Testing System. . . . . b16sts(1)
ed, red: text editor. . . . . ed(1)
ex: text editor. . . . . ex(1)
casual users). edit: text editor (variant of ex for . . . . . edit(1)
acro: find acronyms in a text file. . . . . acro(1)
change the format of a text file. newform: . . . . . newform(1)
fspec: format specification in text files. . . . . fspec(4)
/checkeq: format mathematical text for nroff or troff. . . . . eqn(1)
prepare constant-width text for otroff. /checkcw: . . . . . ocw(1)
typesetting. troff: text formatting and . . . . . troff(1)
format: invoke embedded text formatting commands. . . . . format(1)
otroff: format or typeset text. nroff, . . . . . nroff(1)
plock: lock process, text, or data in memory. . . . . plock(2)
style characteristics of text. prose: describe . . . . . prose(1)
sroff: format text. . . . . sroff(1)
style tables from two or more texts. match: compare . . . . . match(1)
binary search trees. tsearch, tfind, tdelete, twalk: manage . . . . . tsearch(3C)
ttt, cubic: tic-tac-toe. . . . . ttt(6)
data and system/ timex: time a command; report process . . . . timex(1)
time: time a command. . . . . time(1)
mclock: return Fortran time accounting. . . . . mclock(3F)
getdate: convert time and date from ASCII. . . . . getdate(3X)
execute commands at a later time. at, batch: . . . . . at(1)
summarize USORS daily response time distributions. daysum: . . . . . daysum(1)
time: get time. . . . . time(2)
usors: collect UNIX response time information. . . . . usors(1)
plot USORS daily response time percentiles. dayplot: . . . . . dayplot(1)
profil: execution time profile. . . . . profil(2)
up an environment at login time. profile: setting . . . . . profile(4)
stime: set time. . . . . stime(2)
overview of USORS response time summaries. /a historical . . . . . overview(1)
time: time a command. . . . . time(1)
time: get time. . . . . time(2)
tzset: convert date and time to string. /asctime, . . . . . ctime(3C)
clock: report CPU time used. . . . . clock(3C)
process times. times: get process and child . . . . . times(2)
update access and modification times of a file. touch: . . . . . touch(1)
get process and child process times. times: . . . . . times(2)
file access and modification times. utime: set . . . . . utime(2)
process data and system/ timex: time a command; report . . . . timex(1)
file. tmpfile: create a temporary . . . . . tmpfile(3S)
for a temporary file. tmpnam, tempnam: create a name . . . tmpnam(3S)
find all forms of the verb "to be". findbe: . . . . . findbe(1)
/tolower, _toupper, _tolower, toascii: translate characters. . . . . conv(3C)
contents routines. toc: graphical table of . . . . . toc(1G)
/add and delete members to/from a group. . . . . addgrp(1)
popen, pclose: initiate pipe to/from a process. . . . . popen(3S)
toupper, tolower, _toupper, _tolower, toascii: translate/ . . . . . conv(3C)
toascii: translate/ toupper, tolower, _toupper, _tolower, . . . . . conv(3C)
prints files, stopping at the top of each page. pager: . . . . . pager(1)
document. topic: find the topic of a . . . . . topic(1)
topic: find the topic of a document. . . . . topic(1)
system commands for a topic. /Writer's Workbench . . . . . wwbhelp(1)

tsort: topological sort. . . . . tsort(1)
modification times of a file. touch: update access and . . . . . touch(1)
translate/ toupper, tolower, _toupper, _tolower, toascii: . . . . . conv(3C)
_tolower, toascii: translate/ toupper, tolower, _toupper, . . . . . conv(3C)
tplot: graphics filters. . . . . tplot(1G)
tput: query terminfo database. . . . . tput(1)
tr: translate characters. . . . . tr(1)
ptrace: process trace. . . . . ptrace(2)
trail: print trail of archived files. . . . . trail(1)
files. trail: print trail of archived . . . . . trail(1)
tx: IBM tx train filter. . . . . tx(1)
to UNIX. parch: transfer ATS archive document . . . . parch(1C)
umodem: Remote File Transfer Facility for CP/M/ . . . . . umodem(1)
ftp: file transfer program. . . . . ftp(1C)
prtv: print a Basic-16 transfer vector. . . . . b16prtv(1)
tv: structure for Basic-16 transfer vector entry. . . . . tv(4)
sign, isign, dsign: Fortran transfer-of-sign intrinsic/ . . . . . sign(3F)
for nroff/MM. ats: transform pseudo-ats document . . . . ats(1)
/_toupper, _tolower, toascii: translate characters. . . . . conv(3C)
tr: translate characters. . . . . tr(1)
Simple Graphics Language Translator. imalt: . . . . . imalt(1G)
mfx: DI-3000 Metafile Translator interface. . . . . mfx(1)
ftw: walk a file tree. . . . . ftw(3C)
twalk: manage binary search trees. /tfind, tdelete, . . . . . tsearch(3C)
/handle special functions of Trendata 4000A terminal. . . . . 4000A(1)
report. trenter: enter a trouble . . . . . trenter(1)
tan, asin, acos, atan, atan2: trigonometric functions. /cos, . . . . . trig(3M)
broff: batching of nroff and troff. . . . . broff(1)
language. troff: description of output . . . . . troff(5)
9700 printer. dx9700: prepare troff documents for the Xerox . . . . . dx9700(1)
mathematical text for nroff or troff. /neqn, checkeq: format . . . . . eqn(1)
files for device-independent troff. font: description . . . . . font(5)
typesetting viewgraphs/ mv: a troff macro package for . . . . . mv(5)
tc, otc: troff output interpreter. . . . . tc(1)
plotter. stare: send troff output to a local STARE . . . . stare.mh(1C)
device. prism: send troff output to local prism . . . . . prism(1C)
plotter. stare: send troff output to local STARE . . . . . stare(1C)
photo: send troff output to MH typesetter. . . . . photo(1C)
simple pictures. pic: troff preprocessor for drawing . . . . . pic(1)
format tables for nroff or troff. tbl: . . . . . tbl(1)
typesetting. troff: text formatting and . . . . . troff(1)
output from device-independent troff to the MHCC/ /send . . . . . apsend(1)
trenter: enter a trouble report. . . . . trenter(1)
values. true, false: provide truth . . . . . true(1)
pdp11, u3b, u3b5, vax: provide truth value about your/ . . . . . machid(1)
true, false: provide truth values. . . . . true(1)
twalk: manage binary search/ tsearch, tfind, tdelete, . . . . . tsearch(3C)
tsort: topological sort. . . . . tsort(1)
ttt, cubic: tic-tac-toe. . . . . ttt(6)
terminal. tty: get the name of the . . . . . tty(1)
graphics for the extended TTY-37 type-box. greek: . . . . . greek(5)
terminal. ttyin: input data from . . . . . ttyin(1)
a terminal. ttyname, isatty: find name of . . . . . ttyname(3C)
utmp file of the current/ ttyslot: find the slot in the . . . . . ttyslot(3C)
transfer vector entry. tv: structure for Basic-16 . . . . . tv(4)
tsearch, tfind, tdelete, twalk: manage binary search/ . . . . . tsearch(3C)
tx: IBM tx train filter. . . . . tx(1)
tx: IBM tx train filter. . . . . tx(1)

ichar, char: explicit Fortran type conversion. /dcmplx, . . . . . ftype(3F)
file: determine file type. . . . . file(1)
value about your processor type. /vax: provide truth . . . . . machid(1)
whoo: who is on the system and type of line. . . . . whoo(1)
for the extended TTY-37 type-box. greek: graphics . . . . . greek(5)
types. types: primitive system data . . . . . types(5)
types: primitive system data types. . . . . types(5)
ptroff: typeset document. . . . . ptroff(1)
ptroff. pmmt: typeset document with MM and . . . . pmmt(1)
and slides. mmt, mvt: typeset documents, viewgraphs, . . . . mmt(1)
nroff, otroff: format or typeset text. . . . . nroff(1)
macros and ptroff. pmvt: typeset viewgraph with MV . . . . . pmvt(1)
request status of submitted typesetter jobs. phstat: . . . . . phstat(1C)
photo: send troff output to MH typesetter. . . . . photo(1C)
troff: text formatting and typesetting. . . . . troff(1)
mv: a troff macro package for typesetting viewgraphs and/ . . . . . mv(5)
/localtime, gmtime, asctime, tzset: convert date and time/ . . . . . ctime(3C)
value about your/ pdp11, u3b, u3b5, vax: provide truth . . . . . machid(1)
about your/ pdp11, u3b, u3b5, vax: provide truth value . . . . . machid(1)
UNIVAC. ucat: off-line print on . . . . . ucat(1)
Univac. ufetch: fetch data from . . . . . ufetch(1)
getpw: get name from UID. . . . . getpw(3C)
editor. ulib: uniform remote library . . . . . ulib(1)
limits. ulimit: get and set user . . . . . ulimit(2)
creation mask. umask: set and get file . . . . . umask(2)
mask. umask: set file-creation mode . . . . . umask(1)
Facility for CP/M Terminals. umodem: Remote File Transfer . . . . umodem(1)
umount: unmount a file system. . . . . umount(2)
the communications interface/ un53ctl: sets the registers of . . . . . un53ctl(1C)
UNIX system. uname: get name of current . . . . . uname(2)
UNIX system. uname: print name of current . . . . . uname(1)
file. unget: undo a previous get of an SCCS . . . . unget(1)
an SCCS file. unget: undo a previous get of . . . . . unget(1)
into input stream. ungetc: push character back . . . . . ungetc(3S)
to hexadecimal. hex, unhex: convert/unconvert data . . . . hex(1)
language. usl: uniform job submittal . . . . . usl(1)
ulib: uniform remote library editor. . . . . ulib(1)
/seed48, lcong48: generate uniformly distributed/ . . . . . drand48(3C)
a file. uniq: report repeated lines in . . . . . uniq(1)
mktemp: make a unique file name. . . . . mktemp(3C)
units: conversion program. . . . . units(1)
ucat: off-line print on UNIVAC. . . . . ucat(1)
ufetch: fetch data from Univac. . . . . ufetch(1)
discussion of tab handling on UNIXTm. tabs: . . . . . tabs(5)
execution. uux: UNIX-to-UNIX system command . . . uux(1C)
uuto, uupick: public UNIX-to-UNIX system file copy. . . . uuto(1C)
entry. unlink: remove directory . . . . . unlink(2)
umount: unmount a file system. . . . . umount(2)
files. pack, pcat, unpack: compress and expand . . . . . pack(1)
times of a file. touch: update access and modification . . . . touch(1)
of programs. make: maintain, update, and regenerate groups . . . . make(1)
lfind: linear search and update. lsearch, . . . . . lsearch(3C)
sync: update super-block. . . . . sync(2)
sync: update the super block. . . . . sync(1)
du: summarize disk usage. . . . . du(1)
information about correct usage of words. /print . . . . . worduse(1)
the communications interface USART. /sets the registers of . . . . un53ctl(1C)
stat: statistical network useful with graphical/ . . . . . stat(1G)

UNIX on the JES3 network. usend: send files to another . . . . . usend(1C)
utility files. news: USENET network news article, . . . . news(5)
id: print user and group IDs and names. . . . . id(1)
get real and/or effective user and group IDs. /getegid: . . . . . getuid(2)
setuid, setgid: set user and group IDs. . . . . setuid(2)
character login name of the user. cuserid: get . . . . . cuserid(3S)
environ: user environment. . . . . environ(5)
checknews: check to see if user has news. . . . . checknews(1)
ulimit: get and set user limits. . . . . ulimit(2)
the login name of the current user. logname: get . . . . . logdata(3X)
logname: return login name of user. . . . . logname(3X)
boolean description of user PLA. /microcomputer . . . . . m4pb(1)
hex formatter for user PLA. /microcomputer . . . . . m4phx(1)
spelladd: add words to user spelling dictionary. . . . . spelladd(1)
become super-user or another user. su: . . . . . su(1)
the utmp file of the current user. /find the slot in . . . . . ttyslot(3C)
write: write to another user. . . . . write(1)
file entry for specified user-id. /returns password . . . . . whois(1)
Workbench/ wwbaid: On-line user's aid for the Writer's . . . . . wwbaid(1)
dictadd: add phrases to user's diction, spellwwb, or/ . . . . . dictadd(1)
(variant of ex for casual users). edit: text editor . . . . . edit(1)
obtain information about other users. finger: . . . . . finger(1)
mail, rmail: send mail to users or read mail. . . . . mail(1)
language. usl: uniform job submittal . . . . . usl(1)
time information. usors: collect UNIX response . . . . . usors(1)
files. summarize: summarize USORS daily data and maintain . . . summarize(5)
daysum: summarize USORS daily response time/ . . . . . daysum(1)
percentiles. dayplot: plot USORS daily response time . . . . . dayplot(1)
/plots a historical overview of USORS response time summaries. . . . overview(1)
statistics. ustat: get file system . . . . . ustat(2)
gutil: graphical utilities. . . . . gutil(1G)
USENET network news article, utility files. news: . . . . . news(5)
modification times. utime: set file access and . . . . . utime(2)
utmp, wtmp: utmp and wtmp entry formats. . . . . utmp(4)
endutent, utmpname: access utmp file entry. /setutent, . . . . . getut(3C)
ttyslot: find the slot in the utmp file of the current user. . . . . ttyslot(3C)
entry formats. utmp, wtmp: utmp and wtmp . . . . . utmp(4)
/pututline, setutent, endutent, utmpname: access utmp file/ . . . . . getut(3C)
uucall: call another system. . . . . uucall(1C)
control. uustat: uucp status inquiry and job . . . . . uustat(1C)
system to UNIX system copy. uucp, uulog, uuname: UNIX . . . . . uucp(1C)
UNIX system copy. uucp, uulog, uuname: UNIX system to . . . uucp(1C)
system copy. uucp, uulog, uuname: UNIX system to UNIX . . . uucp(1C)
system file copy. uuto, uupick: public UNIX-to-UNIX . . . . uuto(1C)
articles via mail. uurec: receive processed news . . . . . uurec(1)
and job control. uustat: uucp status inquiry . . . . . uustat(1C)
UNIX-to-UNIX system file/ uuto, uupick: public . . . . . uuto(1C)
command execution. uux: UNIX-to-UNIX system . . . . . uux(1C)
val: validate SCCS file. . . . . val(1)
val: validate SCCS file. . . . . val(1)
/u3b, u3b5, vax: provide truth value about your processor/ . . . . . machid(1)
abs: return integer absolute value. . . . . abs(3C)
cabs, zabs: Fortran absolute value. abs, iabs, dabs, . . . . . abs(3F)
getenv: return value for environment name. . . . . getenv(3C)
ceiling, remainder, absolute value functions. /fabs: floor, . . . . . floor(3M)
putenv: change or add value to environment. . . . . putenv(3C)
values. values: machine-dependent . . . . . values(5)
true, false: provide truth values. . . . . true(1)

values: machine-dependent values. . . . . values(5)
/print formatted output of a varargs argument list. . . . . vprintf(3S)
argument list. varargs: handle variable . . . . . varargs(5)
varargs: handle variable argument list. . . . . varargs(5)
return Fortran environment variable. getenv: . . . . . getenv(3F)
users). edit: text editor (variant of ex for casual . . . . . edit(1)
your/ pdp11, u3b, u3b5, vax: provide truth value about . . . . . machid(1)
vc: version control. . . . . vc(1)
print a Basic-16 transfer vector. prtv: . . . . . b16prtv(1)
for Basic-16 transfer vector entry. tv: structure . . . . . tv(4)
option letter from argument vector. getopt: get . . . . . getopt(3C)
findbe: find all forms of the verb "to be". . . . . findbe(1)
assert: verify program assertion. . . . . assert(3X)
vpr: Versatec printer spooler. . . . . vpr(1)
exploring The Dungeons of Doom (Version 9). super rogue: . . . . . rogue(6)
vc: version control. . . . . vc(1)
get: get a version of an SCCS file. . . . . get(1)
sccsdiff: compare two versions of an SCCS file. . . . . sccsdiff(1)
formatted output of/ vprintf, vfprintf, vsprintf: print . . . . . vprintf(3S)
display editor based on ex. vi: screen-oriented (visual) . . . . . vi(1)
processed news articles via mail. uurec: receive . . . . . uurec(1)
se: screen editor for video terminals. . . . . se(1)
macro package for making view graphs. mview: another . . . . . mview(5)
ptroff. pmvt: typeset viewgraph with MV macros and . . . . pmvt(1)
mmt, mvt: typeset documents, viewgraphs, and slides. . . . . mmt(1)
macro package for typesetting viewgraphs and slides. /troff . . . . . mv(5)
on ex. vi: screen-oriented (visual) display editor based . . . . . vi(1)
file system: format of system volume. . . . . fs(4)
vpr: Versatec printer spooler. . . . . vpr(1)
print formatted output of a/ vprintf, vfprintf, vsprintf: . . . . . vprintf(3S)
output of/ vprintf, vfprintf, vsprintf: print formatted . . . . . vprintf(3S)
process. wait: await completion of . . . . . wait(1)
b16pause: indefinite wait. . . . . b16pause(1)
or terminate. wait: wait for child process to stop . . . . . wait(2)
to stop or terminate. wait: wait for child process . . . . . wait(2)
ftw: walk a file tree. . . . . ftw(3C)
wc: word count. . . . . wc(1)
see: see what a file has in it. . . . . see(1)
what: identify SCCS files. . . . . what(1)
signal. signal: specify what to do upon receipt of a . . . . . signal(2)
and/or manual pages. whereis: locate binary, source . . . . . whereis(1)
of line. whoo: who is on the system and type . . . . . whoo(1)
who: who is on the system. . . . . who(1)
who: who is on the system. . . . . who(1)
entry for specified user-id. whois: returns password file . . . . . whois(1)
type of line. whoo: who is on the system and . . . . whoo(1)
about correct usage of words. worduse: print information . . . . . worduse(1)
alternatives. diction: print wordy sentences and suggest . . . . . diction(1)
/print table of Writer's Workbench system commands and/ . . wwbinfo(1)
a/ wwbhelp: print Writer's Workbench system commands for . . . wwbhelp(1)
wwb: Writer's Workbench system. . . . . wwb(1)
user's aid for the Writer's Workbench system. /On-line . . . . . wwbaid(1)
cd: change working directory. . . . . cd(1)
chdir: change working directory. . . . . chdir(2)
get path-name of current working directory. getcwd: . . . . . getcwd(3C)
pwd: working directory name. . . . . pwd(1)
putgrent: format and write a group file entry. . . . . putgrent(3X)
write: write on a file. . . . . write(2)

putpwent: write password file entry. . . . . putpwent(3C)
write: write to another user. . . . . write(1)
write: write on a file. . . . . write(2)
write: write to another user. . . . . write(1)
wwbinfo: print table of Writer's Workbench system/ . . . . . wwbinfo(1)
commands for a/ wwbhelp: print Writer's Workbench system . . . . . wwbhelp(1)
wwb: Writer's Workbench system. . . . . wwb(1)
/On-line user's aid for the Writer's Workbench system. . . . . wwbaid(1)
tape. m4send: Writes m4we input data to . . . . . m4send(1)
open: open for reading or writing. . . . . open(2)
getback: retrieve recently written file. . . . . getback(1)
utmp, wtmp: utmp and wtmp entry formats. . . . . utmp(4)
formats. utmp, wtmp: utmp and wtmp entry . . . . . utmp(4)
hunt-the-wumpus. wump: the game of . . . . . wump(6)
system. wwb: Writer's Workbench . . . . . wwb(1)
the Writer's Workbench/ wwbaid: On-line user's aid for . . . . . wwbaid(1)
Workbench system commands for/ wwbhelp: print Writer's . . . . . wwbhelp(1)
Writer's Workbench system/ wwbinfo: print table of . . . . . wwbinfo(1)
install a BX.25 link. x25alnk, x25ilnk: attach or . . . . . x25alnk(3C)
link. x25clnk: change over a BX.25 . . . . x25clnk(3C)
BX.25 link. x25hlnk, x25dlnk: halt or detach a . . . . . x25hlnk(3C)
detach a BX.25 link. x25hlnk, x25dlnk: halt or . . . . . x25hlnk(3C)
BX.25 link. x25alnk, x25ilnk: attach or install a . . . . . x25alnk(3C)
remove a PVC on a link. x25ipvc, x25rpvc: install or . . . . . x25ipvc(3C)
PVC on a link. x25ipvc, x25rpvc: install or remove a . . . . . x25ipvc(3C)
for the Xerox 9700 printer. x9700: prepare nroff documents . . . . x9700(1)
to print on Xerox 9700 printer (X9700). xopr: filter . . . . . xopr(1)
list(s) and execute command. xargs: construct argument . . . . . xargs(1)
group. xchng: change owner and/or . . . . . xchng(1)
special functions of the XEROX 9700 printer. /handle . . . . 9700(1)
troff documents for the Xerox 9700 printer. /prepare . . . . . dx9700(1)
mmx: print documents on the Xerox 9700 printer. . . . . mmx(1)
xopr: filter to print on Xerox 9700 printer (X9700). . . . . xopr(1)
nroff documents for the Xerox 9700 printer. /prepare . . . . . x9700(1)
9700 printer (X9700). xopr: filter to print on Xerox . . . . . xopr(1)
xopr: offline print. . . . . xopr.py(1)
Fortran bitwise/ and, or, xor, not, lshift, rshift: . . . . . bool(3F)
microcomputer ROM and PLA XY mask. /Generates BELLMAC-4 . m4we(1)
j0, j1, jn, y0, y1, yn: Bessel functions. . . . . bessel(3M)
j0, j1, jn, y0, y1, yn: Bessel functions. . . . . bessel(3M)
compiler-compiler. yacc: yet another . . . . . yacc(1)
j0, j1, jn, y0, y1, yn: Bessel functions. . . . . bessel(3M)
abs, iabs, dabs, cabs, zabs: Fortran absolute value. . . . . abs(3F)